



CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY
and all sections of the drug, pharmaceutical,
fine chemical, cosmetics, and allied industries

*Official organ of the Pharmaceutical Society of Ireland
and of the Pharmaceutical Society of Northern Ireland*

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L. J. Cross, 196 Abington Avenue, Northampton; and
R. Hetherington, 42 High Street, Pelsall, Walsall, Staffordshire.

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C & D

CHEMIST AND DRUGGIST

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Drug Safety

MESSAGE FROM HEALTH MINISTER

MESSAGE from the Minister of Health (Mr. Kenneth Robinson) was read at the opening of the Pharmaceutical Society's "Medicine — with Care" exhibition by the Society's vice-president (Mr. Allen Aldington) at Wallington, Surrey, on September 12.

The Minister wrote:-

"I have followed with great interest the progress of the exhibition round the country. One cannot underline too much the need to take precautions against accidents arising in the home from the thoughtless handling or storage of medicine. There are far too many cases of children having to be admitted to hospital after getting hold of a child's natural inquisitiveness, of medicines that should have been kept safely out of their reach. I hope people locally, as this exhibition continues its tour, will publicise it and support it with local efforts to bring home to all the need to treat medicines with care."

The Wallington opening saw the resumption of the exhibition's national tour.

Earthquake Disaster

REPLY FROM TURKEY

THE following is the text of a telegram received from the president of the Turkish Pharmaceutical Society on September 12:- "THANK YOU FOR YOUR KIND CABLE REGARDING THE DISASTER. WE HAD STOP OUR BEST REGARDS TO YOU AND TO ALL THE MEMBERS OF YOUR SOCIETY." The cable referred to was sent to the Turkish Society on August 22 following the series of earthquakes that caused much damage in Turkey during August (see *C. & D.*, August 27, p. 177).

Prescribable Drugs

DECISIONS IN TWO CASES REPORTED

TWO recent decisions on drugs which an Executive Council is 'bound to provide' are reported in the *British Medical Journal Supplement*, September 10. Both cases had been referred to referees by the Minister of Health. The referees decided that Aquatheron bath liquid should be allowed because the prescriber 'had ample grounds for thinking it would be an effective remedy' (the product was being used to treat conditions due to excessive dryness of the skin). In the second case Neko soap was allowed by the referees who thought that 'the makers'

claim, confirmed by the doctor's own experience, does show that Neko soap may well be a remedy for pediculosis.' Medical members thought that soap might be a useful vehicle for the application of a parasiticide because cleanliness 'is such an important adjunct to the treatment.' The *B.M.J. Supplement* also records that the General Medical Services Committee has received a letter from the Ministry of Health indicating that it is proposed so soon as practicable to allow doctors to prescribe a $\frac{1}{2}$ -yd. length of Tubigrip in $2\frac{1}{2}$ -, $2\frac{3}{4}$ - and 4-in. widths.

Drug Takers

NEW BORSTAL PROBLEM

THE intake of Borstal institutions during 1965 for the first time included boys who were "serious drug-takers," as opposed to "pill-swallowers," records the annual report on the work of the Prison Department, 1965 (H.M. Stationery Office, price 6s. 6d. Such individuals still form, however, a small minority of the Borstal population. Reference is made to two boys who had been addicted to heroin and to others who were regularly taking Indian hemp. The situation, at one time mainly a

London problem, worsened during 1965. It now seems to have spread to other large cities. The character of the women population in prisons and the other institutions has continued to change. "The old type of reliable hard-working woman prisoner seems no longer to exist.... In her place we have, for the most part, sulky, work-shy, unco-operative women, ever-reliant on pills and popular medicines, which they demand daily. Some are mentally or emotionally disturbed. Others are alcoholics or drug addicts." The report adds that the women—not all unintelligent—were not developing their natural intelligence to its full potential. Some were apathetic from defeat, circumstances having proved too much for them.

Purchasing Officers

GOVERNMENT 'MARKS' ROLE DENIED

THE Purchasing Officers' Association disclosed on September 1 that 400 companies were making confidential returns on price increases for passing on to the Department of Economic Affairs. Explaining their action Mr. Peter Emery (the association's director) stated: 'We don't want it to get around that we are acting as the D.E.A.'s marks. The D.E.A. asked to co-operate in the spring of 1965 in a system of obtaining information from us about price movements, and we have been doing this since last September. We are acting in this case as the eyes and ears of a Government department. It is not the association's job to worry about what happens after information about price changes has been passed on.' It is understood that both the Board of Trade and the Ministry of Technology would like the information supplied to them direct.



HANDING - ON: Professor E. Shotton, on completion of his year of office as chairman of the British Pharmaceutical Conference, invests his successor Professor J. B. Stenlake, Glasgow, with his badge of office. The ceremony took place during the closing session at Manchester on September 9.

Delivery Vans

NEED FOR TEST CERTIFICATES

A RECENT official check revealed that users of light delivery vans are often not aware that they may be subject to the regulations for compulsory annual testing. The Order, which comes into force on October 1, lowers the qualifying age for such tests from five to four years and applies to goods vehicles up to 30-cwt. unladen weight as well as to cars. Practically all popular vans and pickups rated by their manufacturers for pay loads of up to 15 cwt., and a certain number of higher capacity, will require an M.O.T. test certificate if they have been registered for four years or more. Dual-purpose vehicles (estate cars, utilities, and so forth, adaptable for carrying either passengers or goods) must be tested if their unladen weight does not exceed 2 tons. Certificates of test are valid for one year and must be produced when the excise licence is next renewed, though it is immediately necessary for a vehicle to have been registered for the prescribed period (from October 1 for vehicles already four years old).

Chemists' Retail Sales

BOARD OF TRADE STATISTICS

THE index of retail sales by chemists and photographic dealers in July was 135 (average monthly sales in 1961=100), an increase of 8 per cent. over the same period a year earlier. Figures recently issued by the Board of Trade also reveal the following indices for the month:—

Independent retailers	131 (+ 7 per cent.)
Multiple retailers	144 (+ 10 per cent.)
Co-operative societies	114 (— 1 per cent.)

Industrial Health

REPORT BY FACTORIES INSPECTOR

IN his annual report on industrial health (Cmd 3081, H.M. Stationery Office price 6s. 6d.) H.M. Chief Inspector of Factories points out that the ever-changing industrial environment inevitably brings new hazards to health and throws up new problems for the doctor, the factory inspector and the legislator. Much of the Inspectorate's current study therefore is

concerned with possible health hazards that may develop over a long period and to the identification of those associated with technological developments. The report records that there were 448 cases of industrial disease or poisoning and 289 gassing accidents during 1965. Carbon monoxide and chlorine continued to be the two main causes of gassing accidents.

Agricultural Chemicals

MORE APPROVED PRODUCTS

THE Agricultural Departments of the United Kingdom announce that the following additional products have been approved under the Agricultural Chemicals Approval Scheme:—

Insecticides

NICOTINE SMOKE FORMULATIONS: Nicofume smoke generators (Pains-Wessex).

THIONAZIN for the control of bulb scale mite in daffodils, and cabbage root fly in cauliflower. LIQUID FORMULATIONS: Nemafo (Cyanamid of Gt. Britain).

Seed Dressings

ORGANOMERCURY WITH GAMMA-BHC. DRY DRESSINGS: Campbell's dual purpose powder seed dressing (J. D. Campbell).

Miscellaneous

THIONAZIN for the control of stem eelworm in tulips and daffodils and leaf eelworm in chrysanthemums. LIQUID FORMULATIONS: Nemafo (Cyanamid of Gt. Britain).

Nail Vanish Removers

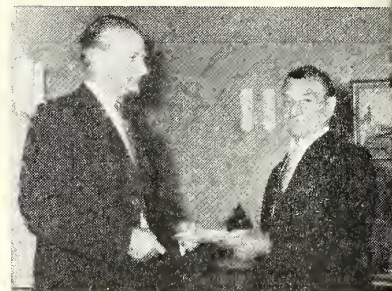
ACETONE RECOMMENDED

ACETONE, or an acetone and water mixture, is given preference over branded nail varnish removers in the September issue of *Which?*, published by Consumers' Association. Buyers who prefer a branded product are recommended Misty. Thirteen of the removers (including one made up by "a local chemist") evaluated by the Association consisted mainly of acetone with some water and occasionally alcohol. Five others contained other solvents. All contained "some oil substance such as lanolin." Testers found that plain acetone left a dry feeling on the nails but none complained of skin irritation. *Which?* concludes by warning of the dangers of leaving liquid removers near a flame and points out that they can damage polished or painted surfaces or clothes.

50 Years' Service

PRESENTATION TO EMPLOYEE

AFTER completing fifty years with The British Drug Houses, Ltd., Mr. I. A. Harold was handed £50 worth of Premium Bonds recently by Mr. F. V. Griffin (managing director). Mr. Harold joined the company as a messenger and walked the City, West End and Blackfriars areas. He subsequently worked in various departments of the company. Graham Street manufacturing plant before being put in charge of stores in



ONE FOR EACH YEAR. Mr. Griffin makes the presentation of the Premium Bonds.

1940. When a new packaging plant was opened at Kensal Road in 1947 Mr. Harold was appointed to his present position of foreman, export and bulk chemical stores. Those who heard Mr. Griffin pay tribute to Mr. Harold's service included his former managers, Messrs. E. W. Price (now pharmaceutical production manager) and G. K. Cade (now warehouse manager).

IRISH NEWS

THE REPUBLIC

New Wholesale Tax

I.D.A. DELEGATES TOLD DETAILS

REPRESENTATIVES of the Irish Drug Association attended a meeting in Dublin recently when officials of the Revenue Commissioners explained the implications of the proposed new 5 per cent. wholesale tax, which comes into operation on October 1. Wholesale chemists, 70 per cent. of whose lines are tax free, are understood to have been given certain guidance.

SCOTTISH EXAMINATION RESULTS

Successful Part III candidates

IN the Pharmaceutical Chemist Qualifying Examination (Part III) held in Scotland during July, the following candidates satisfied the examiners in the subjects indicated (a=pharmaceutics II; b=pharmaceutics III; c=pharmacology; d=pharmaceutical chemistry III).

ABERDEEN

BALFOUR, Patricia M., Aberdeen (b,c,d)
BOWMAN, Ann, Dundee (a,b,d)
DOWNIE, G., Kemnay (a,b,c,d)
LAN HING LIT, L. K. F., Aberdeen (a,d)
LENNOX, Christine G., Isle of Arran (a,b,c,d)
LITTLEJOHN, Ian M., Perth (a,b,c)
MILLER, John, McB., Aberdeen (a,b,c,d)
NEILSON, Patricia A., Kirriemuir (a,b,c,d)

SAMSON, M., Hove (a,b,c,d)

SHEARER, P. W., Buckie (a,b)
SIM, J. R., Fraserburgh (c)
THOW, Angela M., Aberdeen (a,b)
URQUHART, E. A. S., Aberdeen (a,b,c,d)
WOOD, Alison M., Aberdeen (a,b,c)
YUILL, W. R., Aberdeen (a,b,c,d)

EDINBURGH

BALSILLIE, Margaret A., Newburgh (a,b,c,d)

BITTON, Barbara J., Ampthill (a,b,c,d)
CARLAW, Elizabeth A., Edinburgh (b,c,d)
CLARK, Dorothy A., Edinburgh (a,b,c,d)
COCKBURN, Ann M., Perth (a,c,d)
CONWAY, Mary, Cowdenbeath (b,c,d)
CORBETT, Marion E. A., Sale (a,b,c,d)
DEAN, Dorothy F., Durham (a,b,c,d)
DOCHERTY, T. J., Glasgow (c)
DONALDSON, Marjory J., Cupar (a,b,c,d)
DUNN, J. E., Rutherglen (b)
EWING, Jennifer M., Crieff (a,b,d)
GARDINER, Isobel B., Dunfermline (a,b,c,d)

HALL, C., Lanark (b,c,d)
HEASLEY, V. B., Purley (b,d)
JESS, N. W., New Cumnock (a,b,c,d)
LEITH, Rosemary H., Edinburgh (a,b,c,d)
MCGREGOR, A., Edinburgh (a,b,d)
MCINTOSH, P. M., Edinburgh (d)
NEUBOUL, J. A., Rotherham (a,b,c,d)
REID, E. M. P., Glasgow (a,b,c,d)
ROBERTSON, P. C., Jedburgh (a,b,c,d)
ROSS, Elizabeth A., Inverness (a,b,c,d)
ROSS, W. G., Caithness (a,b,c,d)
SHARP, J. G. R., Perth (a,b,c,d)
VALENTINE, Barbara, Edinburgh (a,b,c,d)
WINTER, D. A., Langholm (a,b,c,d)

IRISH BREVITIES

THE NORTH

PRESCRIPTIONS dispensed in Northern Ireland during June totalled 778,860 (512,150 forms). Total cost was £470,432, an average of 144·96d. per prescription.

NEWS IN BRIEF

AN inquiry into air pollution and the working of the Clean Air Act, 1956, is the subject of a programme "But for the Wind" being broadcast in the B.B.C. Home Service on September 29.

THE Ministry of Labour published on September 5 a guide on the Selective Employment Payments Act, 1966. It is set out in question and answer form.

ABOUT 3,000 tablets, mainly amphetamines and barbiturates, were stolen in a raid on the pharmacy of Smith & Dyer, Ltd., 23 Leicester Road, Blaby, Leics. on September 7.

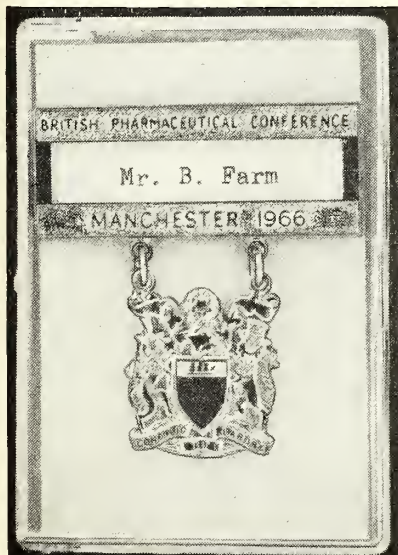
CLOSING date for receipt of applications for the Queen's Award to Industry, 1967, is October 31. Application forms may be obtained from the Office of the Queen's Award to Industry, 1 Victoria Street, London, S.W.1.

A GRANT of £80,000 from the Wellcome Trust and one of £29,700 from the National Fund for Research into Poliomyelitis and other Crippling Diseases makes possible the expansion of the research of four departments at University College, London, all actively engaged in work on aspects of the function of the brain and nervous system.

SPORT

GOLF

SWANSEA AND WEST GLAMORGAN BRANCH, PHARMACEUTICAL SOCIETY. The annual summer meeting of the Branch golfing society was held on July 28. Together with a social held in the clubhouse afterwards the competition raised more than £50 for the Branch charities fund. Results: *Rolando cup* (best net score by a pharmacist), 1, D. Thomas 85 (14), 71; 2, R. Penhallurick, 86 (14), 72. *Best gross score* (open) W. Nicholas, 82. *Silver trophy* (best score against bogey), W. Nicholas, 3 down. *Best score by a pharmaceutical representative*, R. Penhallurick.



CONFERENCE BADGE: The 1966 Conference badge, in gilt, incorporates the Manchester coat of arms.

TOPICAL REFLECTIONS

By Xrayser

Manchester

There was much in the proceedings of the Conference at Manchester to appeal to those who, though holding themselves out as professional, may not find themselves completely at home in the science sessions. Of necessity in a scientific age, the laboratory and the factory have superseded the small-scale and uneconomic activities of the pharmacy itself, though that trend has been growing with increasing velocity for perhaps longer than we are inclined to suppose. There were pharmacists a century and a half ago who saw the economic possibilities of the large-scale manufacture and preparation of drugs and galenicals, and who pioneered the enormous developments of our own time. Sadly to some of an older generation many of the illustrious names have been submerged for no good reason. It must be supposed that there is little room for sentiment in a pharmaceutical empire, but it seems to be of historical importance that the identity of our pioneers should not be lost sight of. Even twenty years ago a recital of the names of many of our manufacturers constituted a pharmaceutical roll of honour. Much of their work, as Professor Shotton said in his presidential address, was of an empirical nature, for until comparatively recent times — with exceptions, it is true — the manufacturers were simply processing, by better methods, the galenicals that had been established in medical favour for over two or three centuries. The scientific laboratory, advances in chemistry, and the inquiring mind have all contributed to complete a revolution. But there must be many problems still to be investigated. Of the multitudes of drugs and galenicals discarded over the years, it may be that some of those that held favour for long periods on a purely empirical reputation could, on scientific investigation in the light of present-day knowledge, yield rewards, and I am glad that pharmacognosy has not been completely abandoned in the science sessions.

The Branch System

In the discussions following the introductory statements on branch organisation, Mr. J. P. Kerr is reported as saying that the basis of branches was democracy, and that branches were collections of people who chose to be active or non-active. That is true of any collection of people, and for that reason there must be a lead, either local or national, or both. Interest in the affairs of a branch lies largely in the hands of local officers, suitably informed, and an imaginative committee can achieve a good deal. As I indicated recently, Mr. Steinman dealt adequately with the subject in 1958, and the Council's recent thinking in the matter has not materially altered the situation. It has seemed to me that there was little wrong with the original concept of branch organisation. The machinery is there, though it is not functioning as it might. With a good many years' experience of branch work. I have felt that headquarters has not sufficiently appreciated the value of full consultation or adequate opportunity for discussion, and in that direction I agree with Mr. J. R. Phillips when he says (p. 248), that, in order to perform a useful function, a branch must be supported from the top, though I am not happy with the suggestion he made in his recent article in *THE CHEMIST AND DRUGGIST* in regard to discipline. Suasion, yes, but not official action at local level. That could be extremely dangerous and, at the least, would seem to strike against the concept of service to members that Mr. Phillips so ardently desires. The dangers of misunderstanding are incalculable.

Family Relationships

Mr. Tristram, in his remarks, referred to the relationship between the periphery and the centre as being on the lines of a well-ordered family. Taking the analogy a little further, one might assume that the centre occupied the rôle of father — wise, benevolent and informative. From the discussion one might almost conclude that the parental obligation to its large family was in some danger of failing in its purpose. But the family has its place also. A lively and imaginative child with a thirst for first-hand knowledge will not be denied. And it is a wise father that knows his own child.

COMPANY NEWS

Previous year's figures in parentheses

BEECHAM GROUP LTD. — Sir Joseph Lockwood has been appointed a director of the company.

LONSDALE - HANDS ORGANISATION, LTD. — The company has purchased a majority holding in its Italian interest which will be known in future as Lonsdale Brose Sp.A. The agency, founded in Milan in 1961, is now listed as the seventh largest in Italy.

DAWSON & BARFOS, LTD. — The group have acquired George Porteus and Sons (Leeds), Ltd. Following the merger the directors of George Porteus and Sons (Leeds), Ltd., are: George Porteus (managing director), N. W. Porteus, R. Clough, George Dawson, T. V. Watkin and D. Cockshott.

ZWANENBERG ORGANON, HOLLAND. — Group net profit of Koninklijke Zwanenberg-Organon amounted to Fls.19.5m. for the first six months of 1966. Operating profit was Fls.36.2m. and sales to third parties Fls.424.5m. Figures cannot be compared with those for the same 1965 period because the 50 per cent. subsidiaries were not completely consolidated before end-1965.

MACARTHYS PHARMACEUTICALS, LTD. — In his first annual report as chairman Sir Hugh Linstead states that the increase in net profits from £218,428 to £292,122 in one year ended April 30 was achieved as a result of additional business in all the subsidiary companies of the group. Plans are in an advanced stage for opening two new depots and it is expected the present increase in turnover should absorb the £38,000 a year that the selective employment tax will cost the company. [For financial statement and dividend announcements see *C. & D.*, August 13, p. 141.]

B.D.H. GROUP, LTD. — Profits before tax for the first half of the year were £867,000 (compared with £863,000 for the corresponding period in 1965). The interim dividend of 4½d. per unit (7½ per cent.) remains the same as last year. There were marginal improvements both in the company's sales of pharmaceuticals and chemicals, and also in the revenue from its wholesaling investment. Mr. F. W. Griffin (managing director) explains that it is not simple to compare the first half of 1966 with the previous year because of the formation of Vestric, Ltd., and also the conversion of the Mead Johnson loan at the end of 1965. Nevertheless, he adds, the figures "have been so prepared as to compare like with like, and indicate that profit before interest and taxation is virtually the same as last year." Group sales, excluding wholesaling, were £4,621,000 (£4,608,000) and profit after taxes of £339,000 (£295,000) amounted to £503,000 (£425,000).

IMPERIAL CHEMICAL INDUSTRIES LTD. — Group home and overseas sales during first half of the year amounted to £448m. (£415m. in the same 1965 period) and income before tax to £51m. (£56m.). Taxation is estimated at £21m. (£14m.) leaving group income after various provisions at £32m. (£42m.), the parent company

accounting for £30m. (£40m.). The volume of sales in the home market in the first half of 1966 was over 9 per cent. higher than in the first half of 1965, but in value they were about 8 per cent. higher. The export volume was also higher, but the value, at £76m., f.o.b., was slightly less. An interim dividend of threepence per £1 unit has been declared which together with the interim dividend of ninepence paid in April equals the interim paid in 1965. The board announces that arrangements are being made for the underwriting of an issue of £60 million 8 per cent. unsecured loan stock 1988-93 at £98 per cent. The prospectus will be published on September 19.

BUSINESS CHANGES

PEDELENE PREPARATIONS (1952), are removing to 10 Anne Place, Bradford, Yorks, on September 19. (P.O. box 293), (telephone: Bradford 681013).

A. C. VALLANCE, LTD., Mansfield, Notts, became the proprietors of the Derby Photo Works (1950), Ltd., on September 2. The Derby Photo works continue in operation for the time being.

P. T. PETLEY & CO., LTD., 9 St Cross Street, London, E.C.1, have acquired the business of H. Ruback, Ltd. Under the arrangement Messrs. Ruback will continue to trade in their own name and the basis of the business will be broadened.

PHILADELPHUS JEYES & CO., LTD., are to close their branch at 60 Gold Street, Kettering, as from the end of September. The company have acquired the whole of the Ordinary share capital of Donald McKinnell, Ltd., 6 Wood Hill, Northampton, which will become a wholly owned subsidiary but will continue to trade under the name of Donald McKinnell, Ltd.

Appointments

SUNBEAM ELECTRIC LTD., 61 Pall Mall, London, S.W.1, have appointed Mr. A. Jones, their area sales manager for North Wales and the Potteries.

UNIVERSITY OF STRATHCLYDE. — Drs. Alexander T. Florence, B.Sc., and David Ganderton, B.Pharm., and Mr. Harry E. C. Worthington, B.Pharm., M.P.S., have been appointed lecturers in the department of pharmacy. The appointments are additional to those previously announced (*C. & D.*, September 3, p. 200).

POLAROID (U.K.), LTD., Rosanne House, Welwyn Garden City, Herts., have appointed Mr. P. H. Gray, general manager of their marketing division. He takes over from Mr. A. E. Giberti who is returning to Polaroid Corporation in the United States to become manager of their consumer optical products division.

PERSONALITIES

DR. JULIAN SHELLEY who was recently appointed medical director of Boehringer Ingelheim, Ltd., after qualifying B.Sc. (Hons. Anat.) from Edinburgh 1954 and M.B., Ch.B 1957, went

to East Africa to work in general medicine and tuberculosis and later taught human biology in Dar-es-Salaam and in the Department of Anatomy, University of East Africa, Kampala. On his return to Britain in 1964, Dr. Shelley took an appointment in research and development with the Winthrop Products Co., Surbiton, Surrey, working first in Scandinavia but later in the whole of Europe.

Mr. JOHN D. MORGAN, B.Sc., who has been appointed managing



director of Bristol Laboratories, Ltd., is chairman of the Slough Branch of the Pharmaceutical Society. He qualified in 1949 under Professor Harry Brindle, and carried out research work on belladonna and ergot alkaloids.

MARRIAGES

BRADY-O'DONOHUE. — At the Church of the Holy Rosary, Harold's Cross, Dublin, 6, Eire, on September 1, Desmond John Bosco Brady, M.P.S.I., 12 Upper Campden Street, Dublin, 2 (son of Mr. P. A. Brady, a former president of the Pharmaceutical Society of Ireland) to Rose Marie O'Donohue, Cootehill, co. Cavan.

OLDROYD-CUMBERLAND. — At Blackburn, Lancs, recently, Roger Donald Oldroyd, M.P.S., 11 North Common Road, London, W.5, to Anne Patricia Cumberland, M.P.S., 117a Gunnersbury Avenue, London, W.5.

DEATHS

AVES. — On August 15, Mr. John Wilfred Aves, M.P.S., Countryside, Tudor Close, Middleton-on-Sea, Bognor Regis, Sussex. Mr. Aves qualified in 1908.

BARRY. — Recently, Mr. Robert Allan Barry, Mount House, Kilmarnock, Ayrshire. Mr. Barry qualified as a chemist and druggist in 1907.

COLLINS. — Recently, Mr. James Frank Douglas Collins, M.P.S., 23 Catisfield Road, Milton, Portsmouth, Hants. Mr. Collins qualified in 1930.

DAVIES. — On August 26, Ernest Hope Davies, M.P.S., 4a Princess Parade, Crofton Road, Farnborough, Orpington, Kent. Mr. Davies qualified in 1930.

FLACK. — On September 8, Dr. Harvey Flack, founder and editor of *Family Doctor*, aged 53. Dr. Flack received his medical degree at Manchester University in 1934, and later was appointed to the editorial staff of the *British Medical Journal*. He launched the *Family Doctor* for the British Medical Association in 1951.

HEALD. — On August 29, Mr. Jack Heald, M.P.S., 37 Uplands Alkington, Middleton, Lancs. Mr. Heald qualified in 1936.

HINDMARCH. — Recently, Mr. James William Scott Hindmarch,

M.P.S., 3 Two Ball Lonnem, Newcastle-upon-Tyne. 4. Mr. Hindmarch qualified in 1928.

MARTIN.—On August 24, Mr. Arthur Hampson Martin, M.P.S., 41 Eaton Road, Enfield, Middlesex. Mr. Martin qualified in 1928.

MOORHOUSE.—On August 29, Mr. John Armytage Moorhouse, M.P.S., 2 Cedars Road, Exeter, Devon. Mr. Moorhouse qualified in 1911.

RITCHIE.—On September 2, Dr. Mowbray Ritchie, Ph.D., D.Sc., F.R.S.E., reader in chemistry University of Edinburgh. Dr. Ritchie had been a member of the Pharmaceutical Society's board of examiners for Scotland since 1944, and contributed to the evening meetings of the Scottish Department. He was a member of council of the Royal Society of Edinburgh.

ROWE.—On September 4, in hospital, Mr. David James Rowe, M.P.S.N.I., 45 Church Street, Portadown, co. Armagh, Northern Ireland. Mr. Rowe qualified in 1932. For over thirty years he carried on business at 73 Woodhouse Street, Portadown, and for the past few years was a director of Rowe's Pharmacy, Ltd., of the same address.

TWEEDY.—Recently Mr. Robert Tweedy, M.P.S., 9 Windermere Avenue, Chester-le-Street, co. Durham. Mr. Tweedy qualified in 1943.

VINCENT.—On August 29, Mr. Hedley Vincent, D.S.O., Ludwell Grange, Horsted Keynes, Sussex, managing director, Scott & Bowne, Ltd., Mr. Vincent joined the company in 1931 and was elected to the board in 1947, becoming managing director in 1955. Mr. Vincent widened the company's business interests in marked degrees both at home and abroad, especially in Australia. He was a council member of the Proprietary Association of Great Britain and a past-chairman and trustee of the Special Forces Club.

WALKER.—On August 25, Mr. Arthur Walker, M.P.S., the Pharmacy, Allendale, Hexham, Northumberland. Mr. Walker qualified in 1921.

WATSON.—On September 3, Mr. George Edward Watson, 34 Martins Drive, Ferndown, Dorset, aged sixty. When Mr. Watson retired in 1964 he was general manager and a director of Crookes Laboratories, Ltd., the company he had joined 44 years previously as office boy.

N.H.S. STATISTICS

In ESSEX contractors dispensed 375,261 prescriptions (250,226 forms) during May. Total cost was £208,417, an average of 133.29d.

In CORNWALL during May 143,448 prescriptions (95,545 forms) were dispensed at a total cost of £85,980. 143.8d. per prescription.

In ENGLAND during May 19,158,257 prescriptions (12,609,493 forms) were dispensed. Total cost was £10,162,945, an average of 127.31d. per prescription. During the period January-May 105,113,140 prescriptions (68,625,058 forms) were dispensed at a total cost of £54,822,046. Average total cost per prescription 125.17d.

MANUFACTURERS' ACTIVITIES

Laboratory for Testing Products.—To assist in the search for new products, Glaxo Research, Ltd., Greenford, Middlesex, recently set up an organoleptics laboratory for testing baby and invalid foods. The laboratory forms part of the company's food research unit at Greenford, and is concerned with assessing the effect of different processes, storage and packing conditions on the flavour and odour of products. Each afternoon a panel of tasters visits the laboratory to test samples of foods produced and stored under varying conditions.

Mutual Trade Development Recognised.—M. & R. Norton, Ltd., 9 Park Hill, London, S.W.4, have received from the R. H. Macy Co., Inc., New York, a certificate appointing them a 'Corporate 'A' Resource Supplier' to the Macy group of stores, in recognition of "outstanding contribution to the development of mutual trade through understanding, co-operation and product excellence." Messrs. Norton state that the certificate is given only to the manufacturers who are considered by the Macy group of companies to be outstanding in delivery and competitive in price in selling with quality merchandise. To the best of their knowledge, Messrs Norton believe they are the first company to have received the award for novelty soap and bath preparations. Messrs. Norton add that their exports are now running at 50 per cent. of their total trade.

Tax Challenge Taken Up.—One manufacturer who has accepted the selective employment tax as a challenge to gain more business is Church & Co. (Fittings), Ltd., Reading. The company's sales director said recently "Efficient and competitive retailers will be exploring every way of increasing their turnover to meet the new overheads imposed by this latest tax blow. Each is faced with the knowledge that the extra cost of a tax on staff wages can be met only by increasing prices, or by increasing his profits. Higher prices mean lost custom, fewer sales. One way of combating that suicidal course is to refit the shop. For no extra staff, one can make a 20 per cent. to 30 per cent. increase in profits within a month of installation. In addition to modernising his store and reaping those benefits, the retailer covers the outlay on the payroll tax and can watch his turnover soar." Messrs. Church manufacture Hokon and Snaptite equipment.

Drugs for Earthquake Survivors.—In response to an appeal on behalf of the victims of the recent Turkish earthquake, GLAXO LABORATORIES, LTD., Greenford, Middlesex, have dispatched 30,000 vials of penicillin G by air to Ankara on behalf of the Group's Turkish company, Glaxo Mustahzarlari, A.S., Istanbul. Also sent were 30,000 vials of distilled water required for administering the penicillin and donated by Allen & Hanburys, Ltd., another company of the Group. The disaster kept the Glaxo antibiotics filling and packing plant at Barnard Castle, co. Durham, at full pressure during a whole

week, a consignment of 50,000 vials of penicillin and streptomycin having been flown to Ankara following an emergency order from the British Red Cross. — More than one million sulphaguandine tablets have been supplied by the pharmaceuticals division of IMPERIAL CHEMICAL INDUSTRIES, LTD., Alderley Park, Macclesfield, Ches., to the British Red Cross Society for relief work among survivors of the Turkish earthquake disaster. The first consignment of half a million tablets, weighing nearly half a ton, was delivered to London Airport on August 24 less than five hours after an urgent order had been telephoned to the division. The second consignment was flown to London on the night of August 25.

Queen's Award Presented.—The Queen's Award to Industry awarded to the Winthrop Products Co., Surbiton, Surrey (C. & D., July 9, p. 39) was handed to one of the company's chemical plant engineers (Mr. George Watson) on August 31 by the Lord Lieutenant of Greater London (Field Marshal Earl Alexander of Tunis). Mr. Watson was selected by the company's works council to receive the award on behalf of all the people in the company. The chairman (Mr. L. M. Spalton) said the Queen's Award to Industry was not conferred on the chairman, managing director, or board of directors, but on everyone who had played a part in the export performance of the winning company. To achieve success in exports required total dedication and enthusiasm from everyone in the organisation. It was symbolic that Mr. Watson had been selected to receive the award because, when the company's export programme had been seriously jeopardised by extensive fires at its Northumberland factory, he had worked long hours and many weekends helping to keep the company's chemical plant operating twenty-four hours a day, seven days a week. Mr. Watson had served under Earl Alexander's Command in Africa from 1942, and had taken part in the subsequent landing at Salerno. Congratulating the company on its fine export performance, Lord Alexander said he was pleased to learn that its directors believed in decentralisation of authority. They had the added satisfaction of knowing that their efforts, besides helping the country's balance of payments, contributed to the health and well-being of its customers overseas.



HANDED OVER: Mrs. Betty Butcher receives her cheque for £500 as winner in Vitapointe competition (see C. & D., September 3, p. 202).

TRADE NOTES

Two-litre Size.—Burroughs Wellcome & Co., 183 Euston Road, London, N.W.1, have made available 2-litre pack of Actified syrup. The bottle has a non-drip, easy-pour neck and is fitted with a screw cap.

Change of Colour.—Burroughs Wellcome & Co., 183 Euston Road, London, N.W.1 announce that the colour of Lanoxin paediatric elixir has been changed from green to yellow. No change has been made in flavour or strength.

Handbag Size.—New Era Laboratories, Ltd., 87 Saffron Hill, London, E.C.1, announce that the trial handbag sizes of Hymosa lotion is now a permanent item in the range. Price of the larger size has been reduced, and details of a "three-for-the-price-of-two" offer of gift packs and toilet soap have been sent to stockists.

Change of Pack.—The Bayer Products Co., Winthrop House, Surbiton, Surrey, announce that Tonsillin tablets are now packed in a 40-tablet glass-bottle pack designed to protect the tablets in humid storage conditions and replacing the 100-tablet strip-foil pack. Exchange of dispensing stock is being effected for the company by wholesale distributors.

Price Reduction Pending.—Beecham Research Laboratories, Great West Road, Brentford, Middlesex, announce that a further reduction is taking place in the price of their semi-synthetic penicillin Broxil on October 10. The reduction will be the third within two years, making a total reduction of 60 per cent. since the product was first launched.

Vermin Traps.—The Sawyer trap, a vermin spring trap, is now on the list of traps approved by the Ministry of Agriculture, Fisheries and Food. The trap may be set in natural tunnels or in artificial ones constructed for taking grey squirrels, stoats, weasels, rats, mice or other small ground vermin, or in the open on their runs to kill or take rats or mice. The trap is manufactured under the authority of Mr. F. E. Sawyer, Netheravon, Salisbury, Wilts.

Trade Discount Concession.—William Freeman & Co., Ltd., Subaseal Works, Staincross, Barnsley, Yorks, announce that, after considering the effect of increased purchase tax on a variety of their products, they are adjusting discounts to the trade to enable the increase in purchase tax to be offset while leaving the retail price to the consumer unaffected. The new arrangement has been made in order to enable the trade to cover the additional cost of the increased tax and at the same time to hold down the retail prices as an incentive to the consumer. Items affected by the decisions are in the Suba-Maid and Suba-Seal ranges.

Intramammary Chloramphenicol.—Parke, Davis & Co., Staines Road, Hounslow, Middlesex, point out that sections of the annual report of the Milk and Milk Products Technical Advisory Committee of the Ministry of Agriculture, Fisheries and Food re-

cently received publicity in the Press. The report states that "chloramphenicol administered intramammarily was excreted quickly, and traces could not be detected by the modified T.T.C. test in milk produced twenty-four hours after treatment. The subcommittee understood that, provided the milk from treated cows was kept back for the appropriate periods, chloramphenicol used as a treatment for bovine mastitis constituted no public health hazard." Messrs. Parke, Davis point out that their own test procedure had established identical results with milk taken from cows treated with Mascetin twenty-four hours previously. However, to ensure that advice given to farmers should cover any unusual situation not covered in experimental procedure, the company are continuing to show on their packages of Mascetin that a period of forty-eight hours should elapse between the end of treatment and the placing of milk in the public milk supply.

Competitions

"Paper Money Chase."—Paper products of Kimberly-Clark, Ltd., Larkfield, nr. Maidstone, Kent (Delsey toilet tissue, Kleenex tissues and kitchen towels), are being promoted by a £30,000 paper-money chase, in which 30,000 customers stand to win £1 each. The promotion is being advertised for four weeks on television and in *Family Circle*.

40,000 Retailers Take Part.—In a Macleans Teasmade competition organised recently by Beecham Toiletry Division, Great West Road, Brentford, Middlesex, over 40,000 entries were received. In a separate competition limited to members of the trade 160 Goblin Teasmades were won. Competition forms were enclosed with each pack of Macleans toothpaste for eight weekly competitions from June 10 to July 29.

Fourth National Promotion.—Bronco, Ltd., Atlas Works, Berkshire Road, London, E.9, announce the fourth national promotion for Dixcel soft toilet tissues in twelve months. A new "Happy Homes" offer gives the customer a saving of up to £7 16s. 3d. on four items for the bedroom (a Bear brand rug size 54 x 27 in. in wool, guaranteed for five years; a Dreamland electric blanket in pink, guaranteed for three years; a pyjama case for girls by Merton Toys in washable nylon, satin lined; and a satin-bound cellular blanket by Tweedvale, guaranteed for ten years). The offer is open until the end of March 1967. Display material is available.

Trip for Four to the United States.—During the next few months purchasers of Johnson's baby powder are being given the opportunity of winning a family trip for four to the United States of America as first prize in a Winnie-the-Pooh competition. The trip includes five days in Disneyland, San Francisco, and two days in New York. The manufacturers, Johnson & Johnson (Great Britain), Ltd., Slough, Bucks, are also presenting 100 prizes

for runners-up and 1,000 third prizes. Competitors may send in any number of entries until March 31, 1967. Until that date all special Winnie-the-Pooh packs of Johnson's baby powder include entry forms for the competition. The winners are being notified by May 1, 1967.

Six Cars Won.—To each of the six winners in a "motoring safety" competition organised by Fisons Pharmaceuticals, Ltd., Loughborough, Leics, and open to chemists only, goes an Austin Mini de Luxe saloon car. Judging in the competition took place at Brands Hatch on August 26, with Graham Hill, the racing driver, as one of the judges. Contestants had to list six motoring safety features in what they considered to be their order of importance, and to complete a sentence beginning "I think the most important motoring safety factor is . . ." Winners were Messrs. R. Hetherington, 42 High Street, Pelsall, Walsall, Staffs; L. J. Cross, 196 Abington Avenue, Northampton; and Tom Turner (pharmacy superintendent, Stockport Co-operative Society, Ltd., Stockport, Ches); Miss Patricia Topping of Topping Bros., 31 Church Street, Preston, Lancs; Messrs. D. A. Northwood, 112 Wolverhampton Road, Stafford; and K. Scotney, 26 Allandale Road, Stoneygate, Leicester. Prizes are being presented at Loughborough later.

Bonus Offers

CLAIROL, LTD., 66 Baker Street, London, W.1. "Summer Blonde." Fourteen invoiced as twelve.

MENTHOLATUM CO., LTD., Slough, Bucks. Mentholatum deep-heat rub. 3s. 10d. size, thirteen 5s. 10d. and 7s. 11d. sizes invoiced as twelve; seven invoiced as six. Mentholatum balm (jars and tubes). Thirteen invoiced as twelve.

WILLIAM R. WARNER & CO., LTD., Eastleigh, Hants. Tyrosolven (20-lozenge pack). Fifteen invoiced as twelve.

VICK INTERNATIONAL, LTD. Milton Division, 10 New Burlington Street, London, W.1. Milton and Napisan. Extra 5 per cent. on purchase through wholesalers. Until October 7.

Premium Offers

DENDRON DISTRIBUTORS, LTD., 94 Rickmansworth Road, Watford, Herts. Yaxa products. Special-offer price reductions on Yaxa roll-on, aerosol, mist and combined pack lapsed on September 5.

GIBBS PROPRIETARIES, LTD., Hesketh House, Portman Square, London, W.1. Elida Sunilk shampoo and hair spray. Silk-backed brush, comb and mirror set for 16s. 11d. plus three empty Sunilk shampoo sachets or label from a Sunilk bottle or hair spray. Until December 31.

SOUTHALLS SALES, LTD., Bessemer Road, Welwyn Garden City, Herts. Mink articles (including a cravat, hats in two styles and jewellery) at substantial reductions.

TRADE SHOWS

GLASGOW. Central hotel, September 19, 6.30 p.m. DREAMLAND ELECTRICAL APPLIANCES, LTD.

EDINBURGH. George hotel, September 22, 6.30 p.m. DREAMLAND ELECTRICAL APPLIANCES, LTD.

NEW PRODUCTS AND PACKS

PHARMACEUTICAL SPECIALITIES

Corticotropic Polypeptide.—CIBA Laboratories, Ltd., Horsham, Sussex, have launched a new speciality, Synacthen, described as a synthetic polypeptide with corticotropic activity. Each ampoule contains 0.25 mgm. of synthetic β^{1-24} corticotrophin as a lyophilised powder and 10 mgm. of mannitol. Indications for Synacthen are in emergency treatment of acute conditions such as status asthmaticus, anaphylactoid shock and drug-sensitivity reactions. The product is issued in a box of six ampoules.

OVER-THE-COUNTER MEDICINALS

Cold-sore Lotion.—Arthur H. Cox & Co., Ltd., Brighton, Sussex, have provided for chemists to meet their special demands, a cold-sore lotion that is available labelled with own name and brand. Active constituents are benzaloniom chloride solution and menthol. The pack is a $\frac{1}{2}$ -oz bottle, which is issued in a display container of twelve.

COSMETICS AND TOILETRIES

"Discovery" Pack.—James, Samuel & Co., Ltd. 56 Fairfield Street, London, S.W.18, are distributing for the manufacturers of the Swiss Mavala nail hardener a new pack called the Mavala "discovery" pack comprising a two-month supply of the product in an attractive bubble pack.

Foamy Hand Cream.—Speedy treatment for the hands at the push of a button is claimed as the "bonus" from a new aerosol foam hand cream produced by Goya, Ltd., 161 New Bond Street, London, W.1. The product is available in Timeless, Wild Silk, Frenzy, Love Affair, Gardenia, No. 5 and Black Rose fragrances.

Make-up Remover.—Guerlain, Ltd., 42 Conduit Street, London, W.1., supply a *Démaquillant Fluide* described as "not a milk but a thorough deep cleanser." The liquid is poured into the palm of the hand and applied with circular movements all over the face and neck. It is afterwards removed with tissues or lukewarm water with face flannel. *Démaquillant Fluide* is presented in a light plastic container.

New Products in the Range.—Worth Perfumes, Ltd., 160 Thames Road, London W.4, announce the following additions to the *Je Reviens* range of perfumery products. A new spray contains $1\frac{1}{4}$ oz. of *eau de toilette*. A new atomiser, in black lacquer and gold finish, fitting comfortably into a handbag, contains $\frac{1}{4}$ oz. of the perfume. A new dusting powder is in a tortoiseshell drum and a new 8-oz. bath soap is below the former giant size. Refills are available of the first three items.

Bath Salts with New Fragrance.—Radox Cologne fragrance has been added to the previous bouquet and pine fragrances of the products. The new-comer has been a long time in preparation but the results, say the manufacturers, Nicholas Products, Ltd., Slough, Bucks, "show that the time has been well spent." Total sales in a test area for four months were 57 per cent. up

on sales for the corresponding months of 1965, and almost exactly half the increase came from Cologne sales.

In South Wales and the West.—Chesebrough-Pond's, Ltd., Victoria Road, London, N.W.1, are test marketing a new hairdressing preparation, Clearway for men, in South Wales and the west of England during September. Each pack carries a voucher which the customer takes to any hairdresser and receives a free haircut (to a value of 4s.) in return. The product is described as a sparkling, clear blue gel with unique water-active cleansing properties; it is easily applied and quickly removed from the hands because it is greaseless, gives the hair a natural, well-groomed appearance, achieves a good lustre without looking greasy, enables the hair and scalp to be rinsed clean with plain water, and to be regroomed with wet combing. Clearway is issued in two sizes of jar and a tube.

Shampoo-type Hair Lightener.—Clairol, Ltd., 66 Baker Street, London, W.1, have produced a new shampoo-type gentle hair lightener, "Summer Blonde." The product comes as a complete kit including plastic applicator bottle and plastic gloves, with nothing further for the customer to buy. Pack size is $4\frac{1}{2} \times 1\frac{1}{2} \times 4\frac{1}{2}$ in. The product is described as a mild oil lightener that gives a girl's hair "the look it generally has after a summer in the sun." Its effect is produced in just five minutes. "Blonde hair looks dipped in sunshine; brown hair takes on hints of red and gold; red hair becomes more fiery." "Summer Blonde" is applied like a shampoo. Poured into the applicator bottle containing its developer, it is mixed and worked into the dry hair like a shampoo. After 5-10 minutes the mixture is rinsed out and the hair is shampooed. The process is repeated in 4-5 weeks.

Redesign for a Range.—Cyclax, Ltd., 65 South Molton Street, London, W.1, are presenting their range of products in a new range of packs developed in conjunction with Thomas Preston (Harlow), Ltd. The new cartons are in Astralux carton board (which has a high-quality gloss finish) and are printed in lilac and gold blocking.



The carton itself of Beauty Tint has also been embossed. In each pack the name Cyclax and Royal Warrant have been gold-blocked.

"New Look" Eye Lashes.—A new item in the Eylure collection of Eylure, Ltd., 60 Bridge Road East, Welwyn

Garden City, Herts, is double-outer fringe lashes, which give the effect of wearing two pairs "without any heavy, unnatural look." That is because the new lashes are made with hairs finely tapered at the inner corners and becoming gradually denser and longer at the outer tips. The new lashes are available in black and brown. Also new is a range of lashes with coloured gems, following the success of the company's crystal range introduced in May. In fur there are "Blue Jewel Mink" (blue fur with matching gems), "Green Jewel Mink" (green fur with green gems) and "Heavenly Jewel Mink" (minky brown fur with pastel pink gems) and in hair two-tone sable tone with green or blue gems and Gold-line in black or brown.

"Transparently Radiant" Make-up.—Max Factor Hollywood and London (Sales), Ltd., 16 Old Bond Street, London, W.1, have launched a new range of make-up, UltraLucent, claimed to give a woman's complexion a "look of almost transparent radiance." The collection includes fluid make-up—a formula containing eighteen ingredients to give a fluid of featherlight texture, remarkable colour quality, and rich in moisturisers; it is available in shades of fair blush, peach dawn, creme glow, soft fawn and natural honey and is presented in an elegant glass bottle with gilt screw cap in its own carton. UltraLucent Highlight "highlights" the face, and any accents or contours, to "create exactly the effect desired." It may be used under or over the foundation and is in one shade in distinctive bottle. UltraLucent pressed powder has the same radiant transparent quality whilst giving adequate coverage and a smooth finish. It may be used alone or as a touch-up and is in shades of fair blush, peach dawn, creme glow, soft fawn and natural honey. It is issued in a rectangular-shaped mirrored compact with puff. UltraLucent pastel glow is a brush-on product in the four shades blush tone, peach tone, pink tone and natural tone. It is in rectangular mirrored compact with brush.

TRANSPORT NOTES

Delivery Vans.—The Ford Transit range is being extended by the addition of two new parcels vans, the Transit 290 and the Transit 390 parcels. Both have been designed to move light, bulky loads. The smaller van has a capacity of 290 cu. ft., with either 1.7 litre V4 petrol or Perkins 4/108 diesel engine. The larger, with a capacity of 390 cu. ft., is fitted with the V4 2-litre petrol engine. Both have an alternator as standard equipment (regarded as essential for this type of vehicle in high-density traffic conditions). Optional are choice of rear axle ratio, rear doors or roller shutter, rear step, half-width bulkhead, roof ventilator, heater, rear $\frac{1}{4}$ -bumpers, tipping single or dual passenger seat and drivers' and passengers' sun visor. Loading heights for the two models are 28 in. and 30 in. respectively, and the internal dimensions behind the driver are:—For the 290 length 91 $\frac{1}{2}$ in.; width 78 in. and height 72 $\frac{1}{2}$ in.; the 390 measurements are 121 $\frac{1}{2}$, 78 and 72 $\frac{1}{2}$ in.

PACKAGING NOTES

In Tube — with "Bonus." — After a test marketing in Scotland, a new pack for Beecham's pills is now in general use. It was designed by Tandy, Halford & Mills, Ltd., and made by Metal Box Co., Ltd. Reasons for the change are given as the need to secure favourable shelf-treatment "in the increasingly display-conscious atmosphere of the chemist's shop," "the fact that distribu-



tion of the pills has now been extended to self-service and supermarket outlets," and "a younger public no longer disposed to allow family advice and tradition to influence their choice of household remedies." A "bonus" is the easier opening, delivery and closure of the Metal Box "flick-top" tube. It is in moulded polypropylene. To enable the tube to be stacked and to give it extra adaptability on display, a tuck-end carton printed by Taylowe, Ltd., is used as an outer packaging.

Coating for Aluminium.—A new Lakadize finish (DIL/100) by Swale Chemicals, Ltd., 848 Brighton Road, Purley, Surrey, is formulated for internal application to aluminium and lead containers and collapsible tubes. Trials have shown the finish to have a high degree of resistance to many foodstuffs, cosmetics and other consumer products. It has also been found useful as a hard external protective coating.

"Economic" Boxes. — Problems involved in producing corrugated containers at "realistic" prices in quantities under 500 are claimed to have been overcome by Bux Corrugated Containers, Ltd., Camey House, Horton Road, West Drayton, Middlesex, with a new type of machine known as the Rite-Size. The company offer a production service virtually from one to a million or more, in any size, at economic prices. The new machine allows production of small quantity boxes to specified size, so that the customer no longer has to accept the nearest size available.

"Photographic" Labels. — A "do-it-yourself" system for quickly producing durable, self-adhesive, metal or plastic labels, name-plates, etc. singly or in small quantities, at only 2½ per sq. in., was recently announced by the Minnesota Mining and Manufacturing Co., Ltd., reflective products division, 3M House, Wigmore Street, London, W.1. Known as Scotchcal photosens-

sitive metal and plastic label it consists of either 0.008 in. aluminium or polyester film treated with a negative-acting diazo coating that is sensitive only to ultra-violet light. Materials can be handled in normal room lighting. Labels for indoor or outdoor use may be produced from almost any type of original provided it is on a sufficiently translucent material and the image is dense enough. They may be in positive or reverse in a variety of colours ranging from black or red on aluminium, or black, red, green or blue on white polyester. Production sequence is to place the original on a piece of Scotchcal and expose for a short period to any ultra-violet source. The exposed material is developed by wiping a developing fluid over it. Being coated with a permanent self-adhesive, the label may be applied immediately, but for maximum durability the makers recommend spraying it with a clear lacquer available from the manu-

facturers. The process is said to allow reproduction of fine detail.

Price, Code and Weight at One Marking.—For marking price, coding and weight in one printing the Pricemaster Tixo label and code-marking machine is claimed the least expensive on the market. In one movement it prints, cuts and applies. Pre-printed label costs are eliminated. The title of the business may be included by incorporating a printing block into the machine. Weighing less than 1 lb., the machine is easy to operate, producing 1,000 labels in 20 minutes. The Tixo is known in the trade as a print-and-apply machine. It prints in the middle of the label and cannot get out of register as the cutting of the label is done after the printing. It prints up to 99s. 11½d with a 7-letter coding. A second line gives weight or other details, and the third line the store name (permanent). Makers of the Tixo are Pricemaster Ltd., 118 North Street, Hornchurch, Essex.



The new S66 1-gall. polythene container of Plysu Containers, Ltd., Bletchley, Bucks, feature of which is its ease of pouring. The light weight of the container, two-finger handle and angled edges, overcome problems often encountered.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

"Having a Try"

SIR,—I see in a newspaper (not the *Morning Star* because the Government will not contribute advertising revenue to that unique periodical) that if my business is in manufacturing I may be entitled to a premium (i.e. refund of selective employment tax plus an additional sum). I can obtain an application form S.E.P.1 from the local office of the Ministry of Labour. I think that I will have a try for, after all, although National Health Service dispensing and preparation of nostrums are specialised forms of manufacturing, they are manufacturing nonetheless.

"KOHIMA"

"Catch the Enchanted Minute"

*Catch the enchanted minute
Hold it while you can
Slip it and it's gone
Outdistanced to the fastest man.*

SIR,—Conference 1966 expresses the feeling of so many who come — the laughter, the humour and wit, the little courtesies, the sherry parties and private parties, the late-night tea-making ceremonies in Halls, all this rounds and surrounds itself in a Pharmaceutical Conference. Everyone had some

enchanted minute — the young with romance still in the air, the not-so-young with their argument, discussion and enthusiasm, and the older their memories of enchanted moments of previous conferences. Many facets and angles of pharmacy are discussed and future policies made in the main debates and also in the individual discussions which go on all the time amongst such a large gathering, discussions that embrace all accents known to these Islands. I nearly said British Isles, but that might cause a smile amongst our good Irish colleagues, and perhaps now, with the opening of the Severn Bridge, our Welsh colleagues as well. The hard and soft accents, the crisp, quick words of many, the slow drawl of others, all make the Conference a polygot assembly of many types, characters, local and national tendencies and ideas, all united in pharmacy, to serve it at all times.

MERVYN MADGE
Plymouth.

Poser Solution

LAST week's Poser was for "Tab. quinine gr. III nocte. Send 60."



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Whither from Manchester?

AVAILABLE evidence suggests that the British Pharmaceutical Conference as at present organised may undergo major changes within a relatively short period. What phoenix will arise from its ashes we can but hazard a guess, though that present the emulsion of scientific, social and professional may be destined to separate out into more distinct strata. The Executive's annual report (p. 279) notifies members that the Executive proposes to introduce modifications into the timetable of the 1967 Conference meeting whereby all the sessions at which original research papers are presented will be held during the first three days of Conference week, and other more radical changes may be in contemplation. Whether that separation of the various fractions is likely to be of major and permanent benefit to the Conference as a whole is somewhat debatable.

A number of those who attend the Conference would almost certainly prefer a greater emphasis on the scientific aspects of the Conference and are prepared to do without any of the social items that are a feature of the present arrangements. Their belief is that, with too great an emphasis on the social side, the Conference will not attract scientific papers of a suitably high standard. On the other hand there is a demand among many others for a Conference meeting with an appreciable content of social activity, and many regular Conference members allocate to the Conference a part of their annual holiday. "Talking shop" has always been a pleasant — and is generally a profitable — pastime among colleagues in any walk of life and the Conference has given it an added attraction for pharmacists by enabling it to be done in unaccustomed surroundings that may not be available in the ordinary way. No Conference, of course, can be arranged successfully without full recognition of the financial aspects that are involved, and it is generally recognised that the British Pharmaceutical Conference is financed principally by the Pharmaceutical Society of Great Britain. The cash involvement is considerable, and the discussions that are proceeding between the Council and the Executive are bound to be coloured by that consideration.

There is a marked tendency to try to correlate the expenditure with some sort of return. Such a return might well be based, for the Society and its membership, on a public-relations or similar advantage that is difficult to evaluate in real terms. Final assessment

whether a Conference is considered successful is dependent on what yardstick is adopted. As at present constituted the Conference is composed mainly of pharmacists, supplemented by non-pharmacists who have a strong involvement in pharmacy and the pharmaceutical sciences. That dichotomy is what has to be considered when new programmes are formulated.

Before any changes are made in the structure or arrangements of the Conference, those most likely to be most affected by the changes, namely the Conference members at large, must be given adequate opportunity to consider the new proposals. That would seem to require far longer time than is usually available for the consideration of, for example, pre-prints of the Conference science papers.

Without Hitch if Without Highlights

ALTHOUGH the Manchester Conference meeting had relatively few highlights, no lack of brightness can be attributed to the local Conference committee who, as Mr. Cowan said at the closing session, had carried out their tasks with unobtrusive efficiency.

A local Conference committee has in many respects an almost impossible task to perform in preparing for Conference meetings. Upon their foundation the Conference structure is erected. They have to provide stage, proscenium and scenery, whilst others come in for the "star" rôles. Yet it is often upon the reaction to the "star" players that the verdict upon the Conference is given and the local committee blamed or praised. Choice of Conference lecturer brought many favourable comments. He was a man pre-eminent in his field and both the content of his lecture and its presentation were clearly acceptable in high degree.

The professional sessions hardly attained the heights or sustained interest of some former occasions, though the first session turned out to be rather better than some may have expected. That was undoubtedly due to the three speakers who opened the discussion, each of whom spoke from a special and evident interest and experience in branch matters. It was also evident that many subsequent speakers had been able to prepare their contributions adequately because of the advance publication of Mr. Tristram's paper. The second professional session suffered from the considerable disadvantage that the subject had to be argued *in vacuo*, and it hardly came to life until Mr. Brus raised the discussion to a constructive level by showing what has been achieved in raising the status of pharmacy in his own country of Belgium. He introduced the theme, taken up by later speakers, that only when the interests of the public and pharmacy coincide is any advance likely.

In our comment last week we looked forward to worth-while contributions during the discussion from some who at previous Conference professional sessions have been in enforced absence at Science sessions. Regrettably that category of contributor was represented by a lone voice—that of Professor Beckett, stimulating as his contribution was. The symposium session, though primarily of interest to hospital pharmacists, was in fact well attended by members from all sectors of the profession. We had expected much more support of the policy of bringing central sterile supply departments under the control of pharmacists, as proposed by Mr. Wing. Possibly one reason of the lack of general enthusiasm on the subject was that hospital pharmacists are

so thin upon the ground that they are fully stretched in maintaining the basic pharmaceutical services. We believe nevertheless that, if the regional c.s.s.d.s proposed by Dr. Weymes come to be established, then pharmacists by their training and experience should

rightfully be appointed to their overall control.

We observed members from the next Conference venue, Blackpool, keeping a watchful eye on matters of organisation in readiness for 1967, and that premier resort should prove outstandingly popular in location.

RETAIL SALES AUDIT

A market-research technique that is important to chemists

KEN CLARKE (senior research executive, Retail Audits, Ltd.)

IN the mass marketing of consumer products market-research organisations help in providing answers to many problems that are as important to retailers as to the manufacturers. Examples of such questions are the impact of advertisements and of package design on sales, what allocation of store shelving the products call for, whether point-of-sale material is suitable and is being used and the like. Whether the retailer likes it or not, his whole business life is gradually being changed by the application of research techniques. Market research performs a useful social function by helping to reduce waste of economic resources caused by inadequate knowledge at the planning stage. It is, indeed, in everyone's interests, the public's and retailer's included, that businessmen, like governments, should have available to them sound and comprehensive information before making decisions that affect everybody.

Economies of scale are obtained by mass-production techniques, and that in turn requires that production decisions shall be made well in advance of purchases by consumers. Whether a product is established or entirely new, forecasts have to be made in marketing it. Expensive and specialised capital equipment has to be allocated judiciously to production lines, and a wrong forecast may prove costly. Bad decisions on any of those points harm the producer but also, ultimately, the retailer and finally the consumer.

The techniques of market research include retail audits, consumer surveys, products and package testing, media research and advertising research. In nearly all forms of market research the basic method is to conduct a survey. Each survey is made upon a sample drawn so as to be representative of the desired populations, since it would obviously be astronomically expensive in, say, an inquiry into the use of prepared baby foods, to interview every mother with a child or children aged 0-2 years. The sample, correctly taken, is sufficient for the technique of using samples derived from the principles of scientific experiment. Just as it is not necessary to boil all the water in the world at normal air pressure at sea level to show that water boils under such conditions at a temperature of 100°C., so it is possible to draw valid conclusions about the reactions of a whole class of people from a suitable percentage of them.

Retailers' Contact with the Subject

The technique that brings retailers most into contact with market research is retail audit research. That technique, which has been in use in Great Britain since the early 1930's, brings the manufacturer reliable data on which to answer some of the questions mentioned earlier, such as distribution, rate of sale, level of stock, usage of point-of-sale display etc., through various types of retail outlet. The data is collected from national panels of selected outlets and for established products measures continuing performance. For new products—or for established products where new marketing methods (changed content or volume of advertising, new promotional material, new selling methods, etc.) are being tried experimentally—test panels in particular areas or towns, selected so as to be fully representative of all the outlets of that type in the

areas or towns, provide information it might otherwise be difficult or even impossible to obtain.

Retail audit research provides factual information from actual counts of stocks and invoices on sales performance, and there is no greater stimulus than data showing actual sales performance below target to prompt a manufacturer to seek to improve the product; its packaging; its point-of-sale display support; its advertising support; or the sales force responsible for it. In the absence of information decisions important to the manufacturer, the retailer and the public may go by default. Proving and testing the product in its development stage, measuring its performance when (and if) it is launched nationally, and watching its progress thereafter, are all simplified by research to the manufacturer, who is then able to supplement the traditional selling effort of the trader at the retail point.

As there are ten times the number of grocers as of chemists, it is particularly necessary for chemists in present conditions that manufacturers should gain the necessary information.

The danger could well be that the producer might dismiss the smaller section as being of less importance. What he may not know is that the average rate of sale through chemists is perhaps ten times that through grocers. This is fairly commonly so, and it means that, in total volume, chemists are highly important in distribution. Any diminution in the amount of information reaching manufacturers on sales performance through chemists may well have the effect of concentrating the manufacturers' attention on other types of outlet, where performance is more easily measurable. Thus the collection of research data can well be as vital for the chemist as it is for the producer.

A PHARMACIST'S ANTHOLOGY **MEDICAL KNOWLEDGE FROM FOREIGN COUNTRIES**

From "The Life of Samuel Johnson," by James Boswell
DR. Wall, physician at Oxford, drank tea with us. Johnson had in general a peculiar pleasure in the company of physicians, which was certainly not abated by the conversation of this learned, ingenious, and pleasing gentleman. Johnson said, "It is wonderful how little good Radcliffe's travelling fellowships have done. I know nothing that has been imported by them; yet many additions to our medical knowledge might be got in foreign countries. Inoculation, for instance, has saved more lives than war destroys; and the cures performed by the Peruvian bark are innumerable. But it is in vain to send our travelling physicians to France, and Italy, and Germany, for all that is known there is known here: I'd send them out of Christendom; I'd send them among barbarous nations."

NOT TO BE TRUSTED: In certain open prisons . . . neighbours from the surrounding community are invited to—"open days," plays and similar functions, the prisoners acting as hosts. At one open prison on such a day a prisoner was on duty as car park attendant. A woman member of the Board of Visitors arrived, parked her car and was about to walk away when the prisoner attendant asked if she was not going to lock it. She said she never did when she came to Board meetings. "Ah," he replied, "but I would this morning: there are a lot of civilians about!"
—Report on the work of the Prison Department, 1965.

BRITISH PHARMACEUTICAL CONFERENCE, MANCHESTER, 1966 CONFERENCE WEEK EVENTS

Wedding Anniversary

MR. J. Tomlinson (vice-chairman of the local Conference committee) and his wife celebrated their twenty-sixth wedding anniversary on the Wednesday of the Conference week and received many congratulations from friends and Conference members.

Appreciated by the Irish Visitors

WHEN contributing to the discussion at the second professional session, Mr. J. O'Donnell (president of the Pharmaceutical Society of Ireland) on behalf of himself and his Irish colleagues thanked the Manchester Committee and the local pharmacists for their help and for making their stay so pleasant.

Golf Competition

HELD at Chorlton golf club, Barlow Hall, Chorlton-cum-Hardy, Manchester, on September 8, the Edmund White golf trophy (donated by Vestric, Ltd., Runcorn) was won by Mr. S. E. Andrews. Second prize (given by the Manchester and District Pharmaceutical Golfing Society) was won by Mr. Pearce Gray. Winner of the ladies' prize (given by J. Waterhouse & Co., Ltd., Ashton-under-Lyne) was Mrs. J. W. Dalton.

Cotton Mill Visits

SO over-subscribed was the one planned visit to a cotton mill on Tuesday afternoon that two more visits had



TARTAN TOWELLING IN THE MAKING: Miss R. R. Haigh, Blackpool, Mrs E. A. Cowan, Bannockburn, and Mrs. K. A. Lees, Greenford, learn from an official at the cotton mill of Ashton Bros., Hyde, how the tartan pattern is woven into the towel.

to be hurriedly arranged. At Hyde, Ches., Conference members saw the works of Ashton Bros. & Co., Ltd., where are produced many types of cotton cloth. Others were welcomed by Christy & Sons, Ltd., Droylsden (who claim to have been the first towelling manufacturers and to have established the industry in the area) and by English Sewing Cotton Co., Ltd., at their Bridgewater Mill, Pendlebury.

Tour of Cheshire Villages

ON yet another sunny morning (Thursday) a party of Conference members travelled via Alderley Edge into the Cheshire countryside to the pretty village of Prestbury, and Bollington where a stop was made for coffee. The tour then proceeded through the narrow lanes to Macclesfield and on to Gawsworth. The view of Gawsworth Hall, a lovely old house in Cheshire black and white style, was much admired and photographed before the coach returned via Siddington with its black and white church and Capesthorpe Hall, to Manchester.

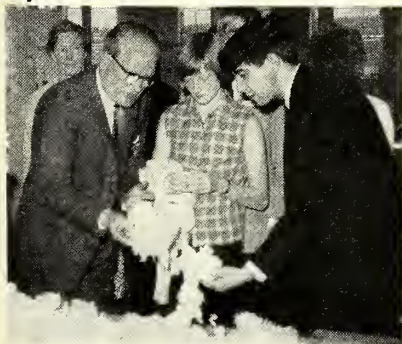
"Down" a Mine

AN "easy" way of seeing a coal mine was the opportunity offered to Tuesday morning excursionists. On a visit

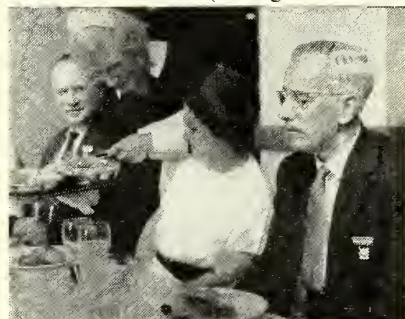
to Salford science museum they were able to see Buile Hill No. 1 pit, a full-scale reproduction of a coal mine constructed with the aid of the National Coal Board. Another place of interest was the city art gallery where could be seen a second full-scale reproduction—this time a street of 19th century shops and houses, known as Lark Hill Place. The gallery also contained a collection of L. S. Lowry's paintings portraying life in the Salford area in recent times.

Excursion to Chatsworth

AFTER an early lunch on Wednesday Conference members embarked in a fleet of coaches for the Conference excursion to Chatsworth House, seat of the Duke of Devonshire. Leaving the industrial north behind at Glossop, the coaches ascended into the Derbyshire Dales by way of the beautiful (but in wintertime treacherous) Snake Pass, descending again alongside the man-made Ladybower reservoir that was formed by flooding one of the many long and narrow valleys (submerging a village in the process). After passing through the villages of Bamford and Hathersage the coaches arrived at Chatsworth, where the excursionists joined many other visitors in a tour of the House and grounds. Unfortunately time did not permit close inspection of both, and some members decided either to take longer over the House — filled as it was with arts and treasures (among them some



Visitors to the cotton mill are given an explanation of some of the opening processes.

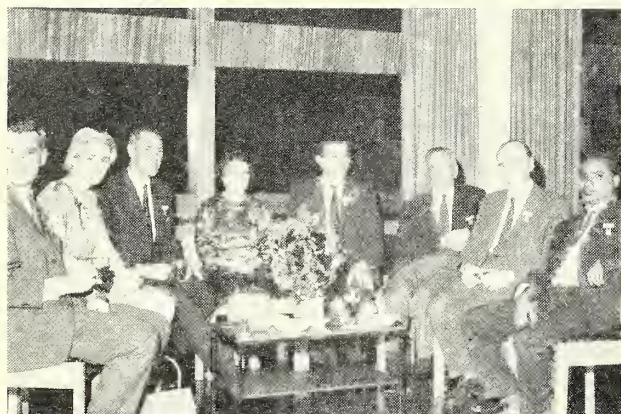


Mr. and Mrs. E. A. Carter and Mr. T. G. Jones during lunch at the Picadilly hotel.



AT CHATSWORTH HOUSE: Messrs: M. R. H. Dennis, Harrow, and M. Burden, South-east London, with Mme. and M. N. Lambert, Belgium, in the grounds. Right: Mrs. A. Greenwood, Mr. and Mrs. W. Talvan Rees, Mr. A. Greenwood, Mrs. and Mr. J. B. Grosset and others in the dining room at Chatsworth House.





AT CONFERENCE CLUB: Dr. R. A. de Zeaus, Holland, Mrs. P. M. Stedman, Dr. D. Doornbos, Holland, Mrs D. A. Carter, Dr. J. M. Pickett, Mr. P. E. Stedman and Mr. C. Mahadevan, Ceylon.

bogus "treasures" that earlier Dukes had unwittingly purchased—or the gardens with their beautiful lawns, lakes, waterfalls and fountains. The return journey was by way of Beeley and Rowsley, tea being taken at various small establishments in the Bake-well area, then through the spa town of Buxton and back to industrial society at Stockport.

Guild Reception and Presentation

A LARGE number of members of the Guild of Public Pharmacists and their friends were welcomed at a lavish reception at the Manchester Royal Infirmary on September 7. They were received by Mr. Morris Agnew (chairman of the board of governors of United Manchester hospitals) and Mrs. Agnew and by Mr. Dennis Smith (president of the Guild) and Mrs. Smith. MR. AGNEW mentioned that four married couples were present who had first met in the pharmaceutical department of the Infirmary. Some had now got children, and that was probably one of the reasons why Mr. Lloyd was insisting upon the department being extended. MR. DENNIS SMITH thanked Mr. Agnew and the hospital authorities for the hospitality. MR. W. A. MOLLON reminded the hospital authorities how fortunate they were in having John Lloyd as group chief pharmacist and said how pleased his colleagues had been when he was recently made a fellow of the Pharmaceutical Society—"a well deserved recognition of his services to pharmacy."



VISITORS FROM HOLLAND: Drs. D. Doornbos, H. I. Hannema and R. A. de Zeelium at the Conference banquet.



AT PUBLIC PHARMACISTS' RECEPTION: Mr. A. G. Shaw, London, Miss Morgan (matron at Manchester Royal Infirmary), Messrs J. R. Carpenter, Croydon, G. E. McIlhagger, Belfast, D. Macfarlane, Dumfries.

MR. WILLIAMS (chairman of the local branch of the Guild) said that when it became known that Miss Evelyn P. Button was to retire it was thought fitting to make a presentation to her at the reception. Miss Button was one of the early chairmen of the contracting committee—"a wonderful chairman relling in the complexities of the work." She had also held office in the local branch of the Guild. Mr. Williams asked Miss Button to accept a tea trolley as "a present from the pharmacists in the Manchester Regional Branch area, with all our very best wishes."

MR. SMITH, on behalf of the Guild council, said Miss Button had at one time been its president and was remembered with esteem and affection and for the integrity and humanity with which she carried out her Guild work. He had the pleasant task, he said, of presenting Miss Button with a tea-service. MISS BUTTON could not find words, she said, to thank everybody for their wonderful gifts. She had enjoyed Guild work except for the two years in which she had been treasurer, when she could "never get the cheques to balance."

Reception by Professor Steiger

SELECTED guests (mainly members of the International Pharmaceutical Federation) were privileged guests at a reception on September 9 at which Professor Steiger was host. Organised through the good offices of Geigy (U.K.), Ltd., Manchester, it took the form of a buffet lunch at the Midland Hotel. Professor Steiger said he was grateful for the opportunity he had been given to be present at the "wonderful week" in Manchester. He made specially appreciative reference to the Conference excursion to Chatsworth House—"more human than Versailles"—and to the way he had been received "as one of you." Now a member of the Pharmaceutical Society of Great Britain he would do his best to deserve the honour. Mr. J. C. Bloomfield (president of Society and of the Conference) said he had many times enjoyed the company of Professor Steiger, especially as a colleague on the Council of International Pharmaceutical Federation. Professor Steiger had done honour to the Society,

he said, in accepting honorary membership.

Civic Reception

MEMBERS of the Conference were invited to a reception at the Town Hall, Manchester, on Thursday night. They were received by the Lord Mayor and the Lady Mayoress (Alderman Mrs. Nellie Beer, O.B.E., J.P., and Mrs. David Maurice). As the guests filed towards the Tower room in which the reception was held they passed through the sculpture hall where the band of the Manchester City Police (director of music, Captain G. C. Hensby, M.B.E., A.R.C.M.) was playing. Dancing in the large hall (to Mick Tarber's orchestra) was interrupted by demonstrations of modern ballroom dancing by Stan Page and Beryl Holland and by visits to the state rooms, where refreshments were provided. The Lord Mayor and the Lady Mayoress shook hands with the guests as they left at the end of the evening.

Conference Ball

CONCLUDING item of Conference week was the Conference Ball, held at the New Century ballroom. A change from previous years was that there were no interruptions for any official conference activities, the installation of the new conference chairman and presentations to local committee members having been carried out earlier in the day. Thus the whole evening was given over to enjoyment. A special feature was the buffet and although for some the service was a little delayed, many were the compliments upon the fare.



In Conversation: The Duke of Devonshire with Professor Steiger at the Conference banquet.

BRITISH PHARMACEUTICAL CONFERENCE, MANCHESTER, 1966

SECOND PROFESSIONAL SESSION

What Medicines Legislation Should Include

THE second professional session of Conference on the morning of September 9, was attended by over 350 members. Opening the meeting THE PRESIDENT (Mr. J. C. Bloomfield) said that, because of the confidential nature of the Government's memorandum on medicines legislation, it might not always be possible to give precise answers to questions. In presenting his paper giving the views of the Pharmaceutical Society's Council on the subject, he said that opponents of the Society's policy aimed at securing restriction of medicines to pharmacists must make their own case. It was no part of the Society's duty to assist them in that.

President's Paper

AS is well known, it is the intention of the Government to introduce comprehensive medicines legislation so soon as Parliamentary time can be found. The first intimation that there was a possibility of such legislation was given as far back as 1959, when an interdepartmental working party on legislation concerning medicines was appointed. That body collected evidence from interested parties, including the Society, and eventually reported, but its report was not published. At the end of 1963 a preliminary memorandum outlining proposals that might be included in comprehensive medicines legislation was circulated confidentially by the Health Ministers to interested parties for comment. In the summer of 1964 a further memorandum filling in the outline was similarly circulated. The Society submitted its views on both memoranda. Since then the Society has urged that a White Paper should be published in order that the Government's proposals can be discussed with the membership before a Bill is published, to avoid the premature rigidity of a Bill. So far there has been no assurance forthcoming that there will be a White Paper or any other public announcement of the Government's intentions in advance of a Bill. It will be appreciated, however, that the task of preparing the ground for such legislation is a formidable one and there is no doubt that a thorough study of the ramifications of such a complex subject has been and is being undertaken. In the absence of any opportunity to discuss the Government's proposals as they are so far known, the Council felt that it would be useful to review at this session some of the matters which pharmacists would wish to see dealt with in comprehensive medicines legislation.

Thinking on New Lines

First of all, however, we should take note of the significance of the concept of comprehensive medicines legislation. It represents a completely new way of Government thinking about medicines and for the first time approaches them as a class of articles calling for special

control measures. The piecemeal approach of past legislation dealing with problems as they emerged and with particular aspects of the field of medicines, has given way to the recognition that all medicinal substances must be looked at as potentially hazardous and needing appropriate measures of control. It is now realised that the public interest is not served by the slow and cumbersome procedure of particular legislation which may mean that a situation is only controlled, if at all, long after the need for control has arisen, or that an existing procedure has to be used for purposes for which it was not designed, as those experienced in the work of the Poisons Board well know.

This development is specially welcomed by pharmacists because not only does it correspond to the principles on which pharmacy is based but it creates an atmosphere in which the aims of pharmacy are more likely to be achieved. What then do pharmacists look for in the new legislation? Primarily, the recognition of the pharmacist as the key factor in the preparation and distribution of medicines. The pharmacist should be involved in an authoritative manner at all stages in the process, from raw material to the time when the finished product is in the hands of the user. Only in that way, we believe, will the public receive adequate benefit from the use, and protection from the misuse, of drugs. Unless that principle is embodied in the legislation, its effectiveness will be weakened.

Should be Comprehensive

The next thing is that the statute should be really comprehensive, it should provide for all problems that now exist or can be reasonably foreseen to be dealt with. The definition of "medicine" should be wide enough in scope to avoid, so far as possible, argument whether a substance is a medicine or not. It should cover animal as well as human medicines. Treatments involving medicines should also be capable of being brought under control. The relevant Ministers should have power to make rules dealing, *inter alia*, with the introduction, production, purity, potency and efficacy of medicines, their storage, packaging and labelling, their advertising and claims made for them, their importation, distribution and possession. Of great importance is the nature, status and scope of the advisory machinery which the Ministers should have at their disposal. Of similar importance is the administrative professional and technical staff needed to carry out the wide range of tasks which the legislation will impose.

So much for the general features of the situation which it is hoped the new legislation will create. Coming now to more specific matters, one may expect that the conditions relating to poisons will apply under the new law

to those substances in so far as they are medicines. They will cease to be classified as poisons when used for medicinal purposes. There will still be a need for poisons requirements for non-medicinal substances, but that aspect of the matter need not concern us now. Medicinal substances which are not at present controlled because they are not listed as poisons will be liable to control. How far will control be exercised? As you know, "All medicines through the pharmacy" is a cardinal item of the Society's policy. The Society in its evidence to the working party said that, in general, the preparation and distribution to the public of medicines should be in the hands of pharmacists except only where the balance of public advantage lies in favour of relaxation of that requirement. The new legislation will not make sense unless that principle is recognised. Pharmacists are prepared to accept the added responsibility that such a policy entails in ensuring an adequate service to the public, both in the supervision of sales and in facilities to obtain supplies. Whether or not it would benefit the pharmacist financially is a secondary matter and, in any case, the question cannot be answered with certainty. It would, however, give more stability to pharmaceutical practice and provide a firmer basis for the planned distribution of pharmacies, which is now part of the Society's policy for the future. That recognition of his function would give the pharmacist the feeling that his services were valued as they should be and act as an incentive to greater endeavour. That surely is a worthwhile objective of public policy.

Let us turn now to other changes one would like to see in the field of pharmaceutical practice. The position of the superintendent of corporate bodies and of the pharmacist who is employed by the representatives of a deceased pharmacist needs to be strengthened. Such a person is in a particularly vulnerable position to be subjected to commercial pressures and needs all the help he can get from the law to maintain his authority. At present the support is quite inadequate. There is a tendency for the responsibility of the superintendent to be insufficiently understood and the Society has great difficulty in ensuring that proper respect is paid to him. The only ground on which corporate bodies or representatives should be allowed to carry on business in pharmacy is that the superintendent should have the decisive word in all matters in which pharmaceutical knowledge and professional responsibility are involved. Conditions should be created clearly to show to members of the public who wish to invest money in pharmaceutical practice that any views they may have on the way the business should be run must be subordinate to those of the superintendent.

Control of Premises

The need for control over premises has long been recognised as important. Indeed, next to the need for medicines to be supplied only through pharmacies, I should say that this is the matter on which pharmacists feel most strongly. The fact that under the present law the Society cannot refuse to register any premises where an authorised seller of poisons is carrying on business in the retail sale of drugs is particularly galling to the Council, who are helpless to meet the criticism that premises have been registered which should never have been. Apart from the more extreme cases, there is a large gap between conditions which might just be tolerated and those which are a credit to pharmacy. Poor conditions of structure, accommodation, fittings, equipment and services not only limit the quality and quantity of service but also create an unfavourable impression on the public.

There are several matters relating to titles which need attention. Restricted titles should not be used in the following circumstances: (a) in the name of a corporate body; (b) in connection with a business, owned by a pharmacist or corporate body entitled to carry on business under the Pharmacy Acts, which is not conducted as a pharmacy; (c) in connection with any departmentalised business owned by a pharmacist or corporate body carrying on business under the Pharmacy Acts except in connection with the department which is concerned with the supply of medicines. Titles which are not restricted to pharmacies but which have a pharmaceutical connotation have always been a problem in so far as they are used by unqualified traders. "Drug Store" and "Chemists' Sundries" and similar terms should be prohibited from use by such traders as misleading.

Before leaving matters particularly affecting the general practice of pharmacy, some further reference should be made to the planned distribution of pharmacies. The Report of the Committee on the General Practice of Pharmacy drew attention to the difficulty of ensuring an efficient and profitable pharmaceutical service unless a degree of national and local planning was undertaken. The subsequent discussion has confirmed that view and the Council has been authorised to make a study and prepare a scheme. It will be apparent that it is not a matter pharmacy can carry into effect on its own. It will require the co-operation of public authorities and Government

backing. It is therefore important that the new legislation should authorise the Government to promote or support such a development.

The control exercised over manufacturing (including wholesale) and hospital pharmacy is meagre as compared with that over the general practice of pharmacy. Statute law does not recognise the rôle of the pharmacist in those branches of pharmacy and subsidiary legislation does so only to a slight extent. It is the Society's contention that the pharmacist should be given statutory recognition in those spheres corresponding to that given him in general practice. Admittedly in the hospital service, as the result of the National Health Service Acts, the pharmacist has been given a status as the result of Ministerial decision, but it would be more satisfactory if this had legal backing.

In the sphere of quality control there is much to be done. The absence of statutory powers to fix standards of quality other than those for "therapeutic substances," the "presumptive" standard of the British Pharmacopoeia, the need to rely on the courts' interpretation, under the Food and Drugs Act, of the "nature, substance and quality" of the drug demanded by the purchaser and the reliance on local authorities to enforce the Act, show the unsatisfactory state of the law on drug quality.

The separation of drugs from food, a procedure for determining standards and the institution of a uniform enforcement system should be provided for in the new legislation. All transactions in medicines, wherever undertaken, should be subject to appropriate testing arrangements.

Control Overdue

The control of the advertising of and the claims made for medicines is long overdue. In spite of the improvement that has taken place over the years as the result of voluntary agreement, the stigma of the quack medicine era still remains to lower the esteem in which medicines are held by the public. The long standing evidence of the potential harm of misleading and exaggerated claims has been reinforced in recent years by the greatly increased knowledge of drug action.

I have mentioned in broad outline a number of things which I believe that pharmacists would like to see done in the new legislation. When the Government's proposals are made public it will be necessary to have a full public discussion of them. That does not, of

course, preclude the raising at this meeting of any matters not mentioned by me which it is felt should be dealt with in legislation.

From the Floor

MR. J. KUDISH, Finchley, expressed concern over the future of pharmacy. Who was to decide where the pharmacies would be—the Society, members themselves, or the landlords? What chance had the small proprietor pharmacist of ensuring a decent trading position? He feared the best positions would be occupied by the multiples.

MR. T. LLOYD JONES wanted to know what was meant by the suggestion that certain medicines would cease to be classed as poisons. He agreed that pharmacists should be involved at all stages from raw material to placing the finished product into the hands of the user. He looked to the Society for action on those lines. Many members viewed with concern the steps taken by the dispensing doctors to entrench themselves. Had the Council considered the need to place limits on the quantity of medicine a doctor might prescribe for a patient at one time? In some countries a medical adviser was not allowed to prescribe for a period of more than fourteen days. There was a case for similar legislation in the United Kingdom.

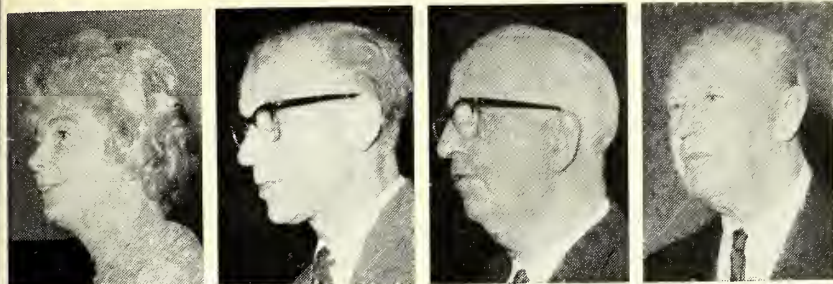
MR. G. FOX, Harrow, described the document as a "piece of wishful thinking," and declared that the basis for it was not necessarily what was best in the public interest. The pharmacist's justification for existence was service to the public, mention of which in the paper was meagre. He regretted that no definition was put forward for a medicine, on matters of which all were left legally "still at sea." The proposals concerning superintendent pharmacists were "wishy-washy" and legislating for them would be difficult. The paper was saying, in effect, that the proprietor of a business should have no control of that business. There were no proposals to alter the Society's Charter so as to allow it to control the distribution of pharmacies, improve the position of hospital pharmacists, or train technicians (who would become essential as pharmacists increasingly became supervisors). The paper contained nothing on health centres. The controls on medicine supply would virtually destroy the proprietary medicine field and would impinge on the rights of the public.

MR. S. G. BUBB, Bournemouth, considered that the president's paper expressed well the hopes and aspirations of the Society's membership. When the Society's powers had been challenged, members had rallied, and there had been powerful unity at the Albert Hall meeting in 1965 to support the president. What Mr. Bubb would like to see would be a determined effort to "put on the pressure," mobilise the lobbying of Members of Parliament and the writing of letters to the Press. It was necessary to act now. "If we wait for the Government it will be too late."

MR. T. W. STEARNE, Manchester, suggested that the line of action would



Mr. G. M. Fox, Harrow; Professor A. Beckett, Chelsea; Mr. C. C. Stevens, Manchester; M. B. Brus, Belgium



Mrs Estelle Leigh, Liverpool; Mr. George Raine, London; Mr. T. Lloyd Jones, Rhyd; Sir Eric Scott, Australia

be affected by the possible entry of the United Kingdom into the European Economic Community, and MR. BLOOMFIELD, taking up the point, invited MR. B. BRUS (vice-president Belgian Pharmaceutical Association) to comment on that aspect.

The Public Interest

MR. BRUS gave a reminder that the principle upon which pharmacists must work was the interest of the public, not that of the pharmacist. Proposals that were parallel to the public interest were likely to succeed. Some pharmacists were too liable to say that any change would be "no good." They must be constructive. The authority of the employed pharmacist should be backed by the law, but the same problem had existed in Belgium. The pharmacist must have the guts to take his responsibilities and show he is the boss on pharmaceutical problems. The title of the pharmacy should be "pharmacy." That was important because the name was one that nobody but the pharmacist could use. In Belgium they had decided that there must be no more sales-promoting displays in windows or in shops. To achieve that objective had been difficult in Belgium, as all pharmacists had feared beforehand that they would lose money by neglecting commercial aspects. But the matter had been made one of ethics and displays disallowed except where they gave no names but only information to the public. It was now a "real pleasure" to look at a Belgian pharmacy. A definition of a medicine had been sought, and now, in Common Market countries, the definition took in every substance or composition to which the manufacturer attributed a therapeutic property, whether the product was for human or for animal use. The conception of monopoly of the sale of medicines should be turned the other way round. The argument should be that the public health needed a specialist for the dispensing of dangerous products. That was to benefit not the pharmacist but the public. If the pharmacist expected the State to give him a monopoly, then it must be as a specialist, and he must not sell anything else. 'What I see in some British pharmacies makes me shiver.' The problems of health must be brought to the attention of the public, and the relationship between the pharmacist, the Press and public opinion was most important. Pharmacists must be prepared to give a day, night and Sunday dispensing service throughout the year. Pharmacies, both in hospital and in

general practice, must be better equipped, and pharmacists must be able to inform doctors about new medicines. If the State wanted its citizens to be able to engage in self-medication, then "three for two" sales offers would be admissible, but if there was not to be full commercial distribution there must be a monopoly. Dispensing must be by pharmacists—not by "personnel." Though personnel could help the pharmacist in stockkeeping, etc., actual preparation must be by the pharmacist. MR. BRUS concluded by advising British pharmacists to have a professional political programme for which they were prepared to fight.

International Aspects

DR. FRED WRIGLEY, London, emphasising the international aspects of pharmacy today, said that one country's legislation impinged on that of another. Unless steps were taken to bring together the "powerful personalities" of the pharmaceutical profession, what was required could not be achieved. A group should be formed to decide what was achievable and what measures were to be desired in the public interest.

MR. C. C. STEVENS, Manchester, who, as a member of Council, stressed that he spoke in a personal capacity, strongly regretted that the Ministry's memorandum remained confidential, precluding discussion upon it. Trade associations had, he said, circulated to their members memoranda from the Ministry, and some of those members were under foreign control. Thus the curious situation existed that a commercial clerk in Kalamazoo could read proposals 'which a registered member of the Pharmaceutical Society cannot.' He hoped it would be possible to arrange for the memorandum to be circulated for discussion at branch meetings, which were in fact the private meetings of the Society. Much misconception existed, said Mr. Stevens, about pharmaceutical legislation. The 1852 Arsenic Act had placed the first legal responsibilities upon pharmacists not as privileges but because the government thought that pharmacists were available cheaply to do the policing necessary to give effect to it. The so-called "monopoly" was entirely illusory. Eighty per cent. of poisons in the United Kingdom were sold through non-pharmaceutical channels. Legislation in the United Kingdom was never enacted for the benefit of an individual or a group of individuals but always for the benefit of the public. With privilege went responsibility. 'If you

are chasing privilege you must accept the responsibility.'

MR. A. G. REID, Leeds, said he was proposing to post that day to his Member of Parliament a copy of the president's paper together with a suitable letter declaring that the proposals were in the public interest. If others were to do likewise pharmacists would 'get the blow in first.'

MR. K. HOLLAND, Romford, submitted that pharmacists had never failed to protect the public. Members of the profession had been first, for example, to notice that misuse of amphetamines was occurring, and the Council of the Society had acted in advance of legislation. In industry many pharmacists were exercising their responsibilities. In his view mistakes or carelessness were much more likely to occur in industrial companies that did not employ pharmacists in responsible positions. It should be made compulsory that responsibility should be exercised by pharmacists wherever drugs were made and distributed.

MRS. E. J. M. LEIGH, Liverpool, speaking as an ordinary and not as a Council member of the Society, said that everybody in general practice knew that every day he or she was protecting the public. Records should be kept of examples of such protection and the information and records channelled back to the Council through the branches.

MR. J. TOMLINSON, Manchester, said he was not so concerned with the status of the pharmacist, or his public image, as with the public's guarantee of being able to utilise to the full the services, training and experience of the pharmacist. For the achievement of that objective the pharmacist must not allow his interests and energies to be dissipated. He himself would not quarrel with the Society if even the sales of "traditional" lines were abandoned.

Hospitals Neglected in Legislation

MR. G. RAINE, Harrow, as a hospital pharmacist, said that in the past legislation had had little to do with the hospital service. There was no legal requirement that pharmacies in hospital must be staffed and controlled by pharmacists, and that was a provision that must come into the new Act. In circumstances where it was impracticable to have a full-time staff pharmacist a general practitioner pharmacist must be brought in to exercise control wherever drugs were stored or used in the hospital. Legislation ought also to ensure appropriate working conditions for hospital pharmacists, and should cover equipment. Inspectors should be appointed by the Ministry of Health and the Society to visit hospital premises. Finally submission of drugs to the Committee on Safety of Drugs should be compulsory instead of voluntary as at present.

MR. P. CRIES, Birmingham, believed that any arguments that were advanced in favour of "all medicines through the pharmacy" would be regarded as selfish by the public. The case must be put in ways that did not seem unreasonable to the layman. In hospitals, pharmacists were not the last

persons to handle drugs before the patient received them, and legislation should provide safeguards against accidents during that final stage.

MR. C. MELLOR, Stockport, asked whether the Council of the Society was fully in the picture over what was going on within the Working Party. If the Council had not the power to present in the right quarters what was being said that morning then the discussion was futile.

Pharmacist Educated for the Job

PROFESSOR A. H. BECKETT, London, was glad that the principle of "service to the public and the community" was emerging from the debate. Pharmacists were seeking to be involved in an authoritative manner at all stages in the preparation and distribution of medicines. When the question was asked 'Why?', the answer was 'Because the pharmacist is educated for that job.' There were specialists in certain aspects but the training of the pharmacist fitted him for overall responsibility involving a number of disciplines, and dangers arose in industry when pharmacists were not involved. The problem of drug addiction would become increasingly difficult, but responsibility for leakages lay not with the industry but with the medical profession through overprescribing. There should be a limit to the time for which a doctor could prescribe a medicine for his patient.

Protective Action

MR. A. R. G. CHAMINGS, Brighton, described situations he had encountered during recent work in a general practice pharmacy. From one customer whom he had recommended an easing-off in the taking of amphetamines prescribed for him he had later received the grateful thanks. He had had to deal with a prescription for 60 mgm. of a drug having a 10 mgm. dose. A woman customer had had to be dissuaded from administering an aspirin mixture to a young baby. He spoke of the "continued irrationality" of the present method of labelling medicines, and recommended his audience to look again at a paper he had presented at the Llandudno meeting of the Conference in 1958.

MR. J. P. BANNERMAN, Glasgow, felt

that the paper did not give a sufficient lead on the subject of advertising. So far as he could see there was no logical or moral basis for the advertising of medicines except to the members of the health professions. To include a recommendation on those lines in the paper would be in the public interest. The pharmaceutical profession could not then be criticised of acting in self-interest.

MR. D. C. MAIR, Glasgow, said it was ludicrous that the manufacture of medicines should be open to anybody.

MR. A. E. SHAW, London (also speaking in a personal capacity), referred to the importance of the advisory body. Members perhaps overlooked that other bodies had interests in medicines. Any structure created must remain flexible.

MR. J. O'DONNELL (president of the Pharmaceutical Society of Ireland) congratulated Mr. Bloomfield on his paper. Members would be glad to know, he said, that some of their aspirations had been included in recent Irish legislation. Wholesalers and animal medicines, for example, had been dealt with, and titles such as drug store and medical hall could not now be used except on premises controlled by pharmacists.

MR. GOLDBERG, Cardiff, considered the paper was preaching to the converted. Members would like to know the facts about the negotiations that had taken place between the Society and the Ministry of Health. 'Until we have the information we cannot know how to act.'

MR. J. A. MYERS, Edinburgh, wished to draw attention to a recent paper published in a medical journal concerning reports of experiences of buying aspirin in chemists.

Aggressive Attitude Required

SIR ERIC SCOTT (Federal president, Federated Pharmaceutical Service Guild of Australia), on being invited by the president to address the meeting, said that the same pharmaceutical problems existed in Australia and America—with the same results. Australian pharmacists had formed a strong, aggressive body and had tried to formulate legislation that would give some of the things they required. 'Justice' was, in political life, meaning-

less: the thing that counted was strength. "If you can show you can influence votes you will get what you want." Pharmacists still had power. They met the public in their pharmacies, they were respected, and they could 'dispense propaganda.' Sir Eric advised British pharmacists not to write to their M.P.s but to see them in person. They must accept that they had to get 'a little bit at a time.'

No Privileges without Responsibility

Summing up the discussion, THE PRESIDENT said there was no controversy with those who advocated approaching the subject from the standpoint of the public interest. He had believed that taken care of in the paper. The Council had been accused of presenting a "pipe-dream" but without ideals 'they might as well go home,' and he believed that the profession was in the mood for fighting for its principles. He agreed that no Government would give privileges to pharmacists unless they were prepared to accept parallel responsibility, but he was confident they would do so. It had been suggested there could be private discussion of the proposals in branch sessions. That had been taken up with the departments concerned, but there was no indication that permission would be granted. There would, however, be an opportunity for discussion when the third memorandum was published, and the Council hoped to be able to take members into its confidence in the very near future. All would agree that the session had been of value.

CORRECTIONS: Though correctly sent forward, part of a report of Mr. Kenneth Holland's contribution to the first professional session (*C. & D.*, September 10, p. 249) was, owing to an unfortunate printer's error, given an almost opposite meaning. The correct version, as it should have appeared, is 'Looking at other associations' [said Mr. Holland] 'We still appear to be a pretty lively lot.'

Mr. A. R. G. Chamings was unfortunately reported incorrectly. His statement was that he regretted that there were heads of schools of pharmacy who were ashamed of being pharmacists.



A group at the academic reception (see *C. & D.*, September 17, p. 251), Mr. W. M. Darling, Mrs. F. W. Adams, Mr. J. P. Kerr, Mrs. and Mr. J. B. Grosset, Mrs. W. M. Darling, Mr. Maxwell Gordon and Mrs. S. Dickinson.

BRITISH PHARMACEUTICAL CONFERENCE, MANCHESTER, 1966

CLOSING SESSION

Conference's Future Under Consideration

THE Conference Executive is modifying the time table of the 1967 meeting so as to present the science sessions during the first three days. Discussions about the future arrangements and constitution of the Conference are proceeding between the officers of the Conference and of the Pharmaceutical Society and any proposals that result are being presented at next year's Conference meeting, which is being held

Ball, he then made the presentation on behalf of members of the Conference to officers of the local Committee and their wives. The treasurer (Mr. H. Burlinson) and Mrs. Burlinson received a dinner service; the secretary (Mr. T. D. Clarke) and Mrs. Clarke a silver tea service; and the chairman (Mr. H. Steinman) and Mrs. Steinman a canteen of cutlery.

After Mr. T. Heseltine and Mr. H. Treves Brown had been re-elected auditors MRS. J. M. ANDERSON invited the Conference to meet in Blackpool. The conference excursion, she mentioned, would be to the Lake District. Acceptance of the annual report was proposed by MR. F. H. OLIVER, Sunderland, and seconded by MR. D. F. SMITH, Bournemouth. The executive had nominated the following officers for 1966-67:— *Chairman*, Professor J. B. Stenlake; *Treasurer*, Professor J. M. Rowan; *Secretaries*, Messrs. E. F. Hersant and K. A. Lees, *Members of Executive*: Messrs. T. D. Clarke and David Jack and Mrs. Alice Greenwood.

A plea that the Conference organisers should try and avoid dates that clashed with the annual meetings of the British Association was made by MR. S. F. WOODWARD, and PROF. SHOTTON



Mr. C. Mellor, Stockport, makes a point at the second professional session

problem had been considered often.

MR. W. GOLDBERG, Hull, suggested that the executive might consider sounding a warning bell after sessional coffee breaks, so as to avoid wasting time, the chairman said that the suggestion would be passed to the local committee.

The annual report was accepted, those nominated as members of executive were elected. PROFESSOR A. D. MACDONALD proposed a vote of thanks to Professor Shotton, a proposition that was seconded by MISS S. M. RIVERS, Liverpool. PROFESSOR SHOTTON acknow-



"Tiny" Heseltine at the Conference banquet

in Blackpool, September 11-16. At information was made known on Sept. 9 at the closing session of the 1966 meeting. After opening the session the chairman called MR. A. COWAN to propose a vote of thanks to the local committee. The two Manchester football teams, he said, were well known. Now there was a third, led by Mr. H. Steinman. It had shown ample evidence of pre-match training, which had resulted in an overwhelmingly successful Conference, basis of which was unobtrusive efficiency. MISS V. W. BURRELL seconded, paying special tribute to the ladies' committee. One of its members — Miss Ivy Roberts — she described as "a legend for her great contribution to pharmaceutical education."

The Conference chairman presented to Dr. Colin Melville (as chairman of the local branch), a gavel for its use. Breaking from recent tradition of a presentation during the Conference

said the timing of the conference had been raised a number of times. It was not a fixed event; though it was usually held in the first three weeks of September, depending on the local conditions.

There were also other conferences, such as the FIP, that the Conference officers attempted to avoid. Even so, he believed there was a direct clash next year. He assured Mr. Woodward the

ledged the vote before handing over his badge of office to the incoming chairman (Professor J. B. Stenlake) who said the appointment was especially pleasing, in that 1967 would be the twenty-fifth anniversary of his first presentation of a paper at a science session of the Conference. Before closing the meeting Professor Stenlake handed over to his predecessor a replica of the chairman's badge.



CONFERENCE SOUVENIRS FOR LOCAL OFFICERS: Mrs. and Mr. T. D. Clarke (secretary), Mrs. and Mr. H. Burlinson (treasurer), Mrs. and Mr. Steinman (chairman); and Dr. Colin Melville (chairman, Manchester Branch of the Pharmaceutical Society). WOMEN PHARMACISTS' SHERRY EVENING: Mrs. I. M. Z. Elliott (vice-president, National Association of Women Pharmacists) pins a rose on the dress of the Association's president (Miss M. A. Burr). With them are Mrs. Alice Greenwood (treasurer) and Miss E. C. Lindsay-Rae (secretary).

WHITWORTH
HALL

103rd MEETING BRITISH PHARMACEUTICAL CONFERENCE

PRESIDENT
OF THE
CONFERENCE
AND OF THE
PHARMACEUTICAL
SOCIETY OF
GREAT BRITAIN

J.C.
BLOOMFIELD J.P.

"MEDICINES...
A SUBJECT ON
WHICH THE MAN IN
THE STREET REGARDS
HIMSELF AS AN
AUTHORITY
AND IS GENEROUS
IN ADVICE TO HIS
FRIENDS"

"HAVE ONE
OF MINE"

CONFERENCE
CHAIRMAN

PROF. E.
SHOTTON
B.Sc., Ph.D.

"PHARMACEUTICS"

CONFERENCE
LECTURE

"ATTENDANCES AT
CHATSWORTH HOUSE
HAVE BEEN
DISAPPOINTING THIS
YEAR, SO I LOOK
FORWARD WITH GREAT
PLEASURE TO YOUR
VISIT"

HIS GRACE THE
DUKE OF
DEVONSHIRE
CHANCELLOR OF
MANCHESTER
UNIVERSITY



THE LORD MAYOR
OF MANCHESTER
ALDERMAN
MRS. NELLIE BEER, OBE, J.P.

A.T. HARDY
PRESIDENT
PSN.I

AN IRISH TRIO - BUT ONE IS AUSTRALIAN IRISH

W.J.
TRISTRAM
OBE, J.P.
REORGANISATION
OF THE
BRANCH SYSTEM
"APATHY
IS MORE
APPARENT
THAN REAL"

NORTHAGE J. de V.
MATHER, M.B., Ch.B.
CONSULTANT PSYCHIATRIST
MANCHESTER REGIONAL
HOSPITAL BOARD

JACK
O'DONNELL
PRESIDENT
P.S.I.

PROFESSOR
K. STEIGER
HON. MEMBER
PHARMACEUTICAL
SOCIETY OF
G.T. BRITAIN

G.T.
TUCKER
(CHELSEA)

ATHOL
KELLY J.P.
GENERAL SECRETARY
PHARMACEUTICAL
ASSOCIATION
OF AUSTRALIA
(HIS GRANDFATHER
WENT TO AUSTRALIA
FROM TIPPERARY
IN 1867)

NOTES
DEXAM-
PHET
AMINE
TESTS
FOR...

C. MAHADEVAN
PHARMACIST,
FACULTY OF MEDICINE
UNIVERSITY OF CEYLON
HERE ON BRITISH
COUNCIL FELLOWSHIP
COLOMBO PLAN

SPECIAL
CLAP FOR
T. (TINY)
HESELTINE

PAST
PRESIDENT
OF THE
PHARMACEUTICAL
SOCIETY

MANCHESTER

SEPT. 5th
to 9th 1966

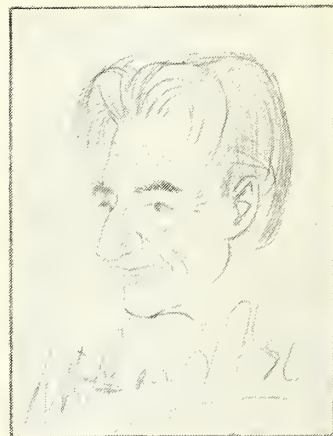
NOT ONCE
IN USE!



The Conference Local Committee sustained the **HARMONY** throughout the week.

HARRY STEINMAN
CHAIRMAN

"THERE'S ONLY ONE
FOOTBALL TEAM
IN MANCHESTER"



CONFERENCE MEMBERS
ENJOYED THE HALLÉ CONCERT
ON SUNDAY SEPTEMBER 4th.
("HUT" WAS AMONG THE WOOD-WIND AT THE
FINAL REHEARSAL)

JACK
TOMLINSON
VICE
CHAIRMAN



DR. COLIN
MELVILLE
UNIVERSITY
LIAISON
COMMITTEE



H. BURLINSON
TREASURER



A PROFUSION
OF £2 NOTES

T.D.
CLARKE
SECRETARY

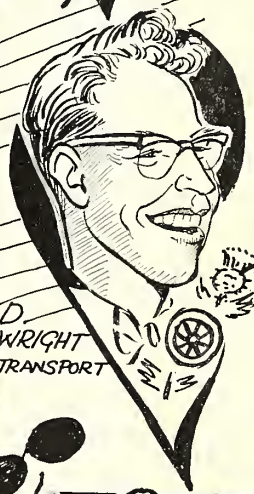


CHARLIE STEVENS
A MEMBER
OF SOCIETY'S
COUNCIL.
"A COMMERCIAL
CLERK IN
KALAMAZOO CAN
SEE THE MEMORANDUM
- PHARMACISTS
STILL MAY NOT"

GEORGE
PRICE
STATISTICS
PRINTING



MISS
IVY
ROBERTS
CHAIRMAN
LADIES
COMMITTEE



D. WRIGHT
TRANSPORT



K. BIRCH



CLAUDE
MELLOR
MEMBER
OF
COMMITTEE

DR. E.F.
HERSANT
JOINT
CONFERENCE
SECRETARY



W.E.
PHILLIPSON



Quote of the Conference! "PHARMACY IS LIKE THE PICCADILLY HOTEL - ONLY TWO WAYS IN, BOTH VERY DIFFICULT. IT'S QUITE NICE WHEN YOU'RE IN BUT YOU CAN'T GET OUT AGAIN" - B. BRUS (BELGIUM)

BRITISH PHARMACEUTICAL CONFERENCE, MANCHESTER, 1966

SCIENCE SESSIONS

(Continued from THE CHEMIST AND DRUGGIST, September 10, p. 254)

MR. A. H. THOMAS on September 5 presented the short communication:—

BACTERIOPHAGE - Effect of peptone on the inactivation of by chemical antimicrobial agents

W. R. L. BROWN and A. H. THOMAS
(School of pharmacy, University of London)

CHEMICAL inactivation of bacterial virus by non-viral organic matter has been investigated, using peptone (which is known to reduce the activity of some agents against *B. subtilis* spores). Bacteriophage was coliphage T6r, and host bacterium *E. coli*. Antimicrobial agents tested were cetrimide, B.P., chloramine-T, formaldehyde solution and phenol. Concentrations were those known to inactivate at least 90 per cent. of the inoculum in 30 minutes at 25°C. in the presence of 0.01 per cent. peptone. In the test reactions the effect of peptone was thus being tested on the resistant fraction of the inoculum. Cetrimide, chloramine-T and phenol showed a decrease in viricidal activity with increasing peptone concentration (phenol having its most pronounced effect at up to 0.055 per cent. peptone; cetrimide at concentrations above that). Formaldehyde showed increasing activity with increasing peptone concentration. It is suggested that some phage particles are reversibly inactivated in the presence of low peptone concentrations, but that at higher concentrations the phage is permanently damaged, possibly by formation of a formaldehyde-peptone complex that is more firmly held at the site of action than formaldehyde alone.

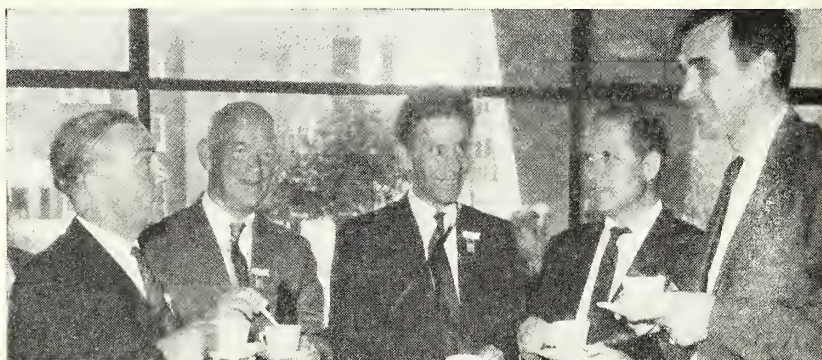
DR. HARRIS noted that the same limiting concentration of peptone affected cetrimide and phenol, and suggested that the effect might be on the virus rather than on the antiviral agent.

MISS STELLA M. RIVERS then presented her first paper to a Conference.

BENZOIC ACID, PHENOL and HYDROXYBENZOATES - Effect on the oxygen uptake and growth of some lipolytic fungi

STELLA M. RIVERS and V. WALTERS
(Department of pharmacy, University of Ife, Ibadan, Nigeria)

MICRO-organisms having been shown capable of multiplying in emulsions containing preservatives, the authors investigated the effect of benzoic acid, phenol and hydroxybenzoates on the respiration and growth of five lipolytic fungi in agar culture medium containing arachis oil. Sodium benzoate 0.1 per cent. and benzoic acid 0.01 per cent. were found to stimulate oxygen uptake, benzoic acid 0.1 per cent. to suppress it. Preservative action of organic acids is due mainly to the mixture for sodium benzoate, the con-ionised molecules. In the reaction concentration of un-ionised benzoic acid is calculated to have been too low for growth inhibition and, since respiration was stimulated, the un-ionised



Interval during a science session. Included in the group are Dr. E. A. Rawlins, Professor H. Brindle, Dr. J. M. Pickett and Dr. J. E. Carless.

molecules or anions probably have been metabolised. With organisms that are able to utilise oil as a source of exogenous carbon during pre-germination, the effect of preservatives does not seem, in the view of the authors, to be entirely dependent upon the concentration in the aqueous phase. The use of a preservative with an oil/water partition coefficient sufficient to produce a suitable concentration in the oil phase would appear to show advantage. For ionisable compounds, the pH of the aqueous phase should be such as to ensure that the biologically active form is mainly present.

DR. J. E. CARLESS, London, asked whether, during the growth of the fungi, there had been increased oxidation of the arachis oil and whether the authors had tried including antioxidants. MISS RIVERS said she had not worked with the oil alone but, when antioxidants were included, the oxygen uptake was exactly the same as without antioxidants. DR. BEAN mentioned that Dr. Walters had already shown that phenols with a high partition coefficient are taken up in high proportion by the organism—up to 50 per cent. Was there any indication of the residual preservative concentration? No replied MISS RIVERS, though she thought the work worth following up. DR. W. R. L. BROWN asked if it were clear that the mould was metabolising the preservative and that the permeability of the cells was not being increased. MISS RIVERS replied that the fact that there was growth on the agar medium was an indication that the increased oxygen uptake, was not being caused by increased permeability.

Chairman of the science session on Tuesday morning was Professor Shotton. First paper to be taken was read by DR. HUNTER.

STRYCHNINE METABOLISM—Stimulation in rats by some anticonvulsant compounds

J. F. HOWES and W. H. HUNTER
(Pharmacy department, Chelsea College of Science and Technology, University of London)

STIMULATION of oxidative metabolism of foreign compounds by prior admin-

istration of drugs is a well recognised phenomenon that may influence the results of accepted pharmacological screening techniques. The authors have investigated the metabolism of a series of 4-acetyl-1-naphthyl ethers in rats and in fractions of rat liver homogenate, and the effect of their administration on strychnine metabolism. They found that those members of the series which are metabolised (oxidised) by the microsomal fraction of liver homogenate all stimulate strychnine metabolism. Oxidative metabolism of strychnine having been shown to occur in the microsomal fraction of liver from various species, the authors suggest that microsomal oxidation of the anticonvulsant compounds might be the process leading to an increased rate of strychnine metabolism.

PROFESSOR BROWNLEE, London, commented that the paper opened up a much wider field than the metabolism of strychnine. Were all the alcohols corresponding to the ethers investigated oxidised in the liver fraction, he asked? DR. HUNTER replied that that question was currently being investigated. The obvious enzyme to cause such oxidation was liver alcohol dehydrogenase. Ten attempts with the enzyme had each failed, but they might have been using the wrong one. It was also possible that one of the steroid dehydrogenases might act as substrate. It was possible that one alcohol that produced no prolongation of protection from strychnine was either oxidised before it reached the liver or was perhaps not absorbed by the tissues. It would be useful to obtain the gradation in partition coefficients of a series of similar alcohols. DR. FISHER, Dartford, was told that no toxicity had so far been found of the authors' compounds.

Second paper, presented by Miss Castleden, concerned:

SODIUM IONS—Some studies of diffusion through protein solutions and phospholipid sols.

JENNIFER A. CASTLEDEN and R. FLEMING
(Department of physical chemistry, School of Pharmacy, University of London)

DIFFUSION of sodium-22 in solutions containing sodium chloride, calcium chloride, bovine plasma albumin, lecithin and cholesterol has been examined by modifications of the open-end capillary technique of Anderson and Saddington (1949) and the continuous monitoring technique of Mills and Godbole (1958). Preliminary investigations have been made of semi-infinite systems consisting of lecithin sols layered on albumin solutions. Good agreement has been found between the activity in the capillary at various times during diffusion and the theoretical activity.

MISS CASTLEDEN agreed with PROFESSOR A. R. ROGERS, Edinburgh, that a longer capillary tube, which would have allowed her equations to be applied over a longer period, would have been desirable, but said that a limit had been imposed by the size of the counter used.

Next MR. G. T. TUCKER introduced a short communication on:

ORAL PROLONGED-RELEASE FORMS OF DEX-AMPHETAMINE—Method of evaluation using urinary excretion data

A. H. BECKETT and G. T. TUCKER
(Pharmacy department, Chelsea College of Science and Technology, University of London)

URINARY excretion of amphetamine is pH-dependent, reflecting drug level in the plasma only when the renal re-absorption is negligible (at urinary pH 5.0 ± 0.5). The authors have there fore followed excretion rates in subjects in whom an acidic urine was maintained by administration of ammonium chloride. A number of pellet-type preparations of dexamphetamine sulphate were used in a variety of dosage regimens, and amphetamine was detected in the urine by a gas-liquid chromatographic method. Increasing the thickness of a lipid coating on the pellets delayed the peak excretion rate; enclosure in a gelatin capsule delayed by $1\frac{1}{2}$ –2 hours the time for complete absorption. The results indicated that dexamphetamine is absorbed throughout a substantial portion of the alimentary tract. Two commercial capsule products (one containing a mixture of lipid-coated pellets, the other uniform pellets coated with a dialysing membrane) eliminated the "peaking" effect of a single 15 mgm. dose and the "staircase" effect of a 5 mgm. dose three times a day. The results suggest that both the commercial products tested are capable of prolonging the absorption of dexamphetamine and of producing reasonably sustained release of the drug for 7–8 hours.

MR. TUCKER told MR. RIDWAY, Leicester, that only at pH levels around 7 would differing rates of urine excretion affect the amount of amphetamine excreted. MR. R. L. STEPHENS, Amsterdam, thought the results indicated that prolonged dosage forms should not be used where a rapid action was required. His own experiments had indicated that there was no difference in rate of absorption of drugs in solution and drugs in capsule form. MR. TUCKER said the authors had concluded that it was the gelatin capsule that delayed absorption.

MR. SENIOR, Macclesfield, said that formulation of drugs in hard capsules needed great care, owing to the possibility of their being excreted unchanged. He suggested that sodium bicarbonate might be incorporated to aid disintegration. PROFESSOR BROWNLEE found the possibility of performing an evaluation of a prolonged-release dosage form on a single subject intriguing, but felt that more evidence should have been given in order to allow of the correct emphasis being placed on the findings.

PROFESSOR BECKETT rose to point out that a short communication was being given: the full data would be published later. It had been felt important to put across the possibility of evaluating formulated products without the need for statistical analysis. The method had been adopted by manufacturers in a number of countries, and further evidence of its usefulness would certainly be gained. PROFESSOR A. D. MACDONALD, Manchester, thought that an examination of the authors' results showed that only rarely was free amphetamine being economically used, and that a certain amount of wastage occurred in all slow-release forms. He pointed out that in some subjects it was possible to get a potentiation between amphetamines and barbiturates rather than the usual opposition. That was important as regarded public health.

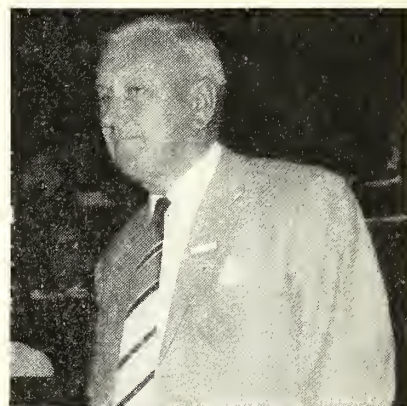
DR. FOSTER commented that, in his experience, absorption and metabolism of drugs varied in different populations of the world. It might be interesting to try out the authors' experiments on subjects from a different nation and compare results.

DR. FISH, Glasgow, asked whether, since driving under the influence of drugs was an offence, it would be possible to determine the approximate amount of drug in a person who was also under the influence of alcohol. No information was available on such determinations, he was told.

MR. STEPHENS referred to earlier

work by Professor Beckett which showed that substances rendering the urine alkaline could cause retention of amphetamine in the body. Could some of the ill effects of amphetamines in patients be due to that cause he asked, and should not a warning against taking alkalising drugs with amphetamine be given at the time of dispensing? PROFESSOR BECKETT agreed that some evidence had been obtained that sportsmen had found out about the effect of alkaline substances. The effect of a capsule on slowing down absorption depended to a large extent on the drug in the capsule. Much surprise had been caused by the discovery that a soluble drug such as amphetamine sulphate had shown that effect. MR. S. G. E. STEVENS, London, asked whether any account had been taken of the variation between capsules and also of variation within single capsules. Such variations could lead to differences in time of release within a single batch. MR. TUCKER thought that differences in absorption of a drug from such causes would not be important when compared with its rate of elimination.

(To be continued)



Mr. R. L. Stephens, Amsterdam, raises a point at one of the science sessions.

SPECIES VARIATION IN DRUG METABOLISM

"Crucial factor in biological examination"

PROBLEMS raised by the differing metabolism of drugs in different animal species was dealt with by DR. W. A. M. DUNCAN (Smith, Kline & French Laboratories, Ltd.), in a paper read to the physiology and biochemistry section at the annual meeting of the British Association for the Advancement of Science, held recently in Nottingham.

Metabolic Variations

Species variation in the metabolism of drugs, said Dr. Duncan, once regarded as a nuisance to be overcome largely by increasing the number of species used in the evaluation of new drugs, food additives, insecticides, etc., was now recognised as crucial in such biological examinations.

Animals varied not only in their particular enzyme systems but also in the quantitative distribution of the enzymes in their tissues and those factors accounted for the variety of

both the end products and metabolic rates. Investigation of enzymes of intermediary metabolism in mammalian tissue should become even more useful in the early diagnosis of incipient tissue damage. The lactic dehydrogenase of mammalian heart had been shown kinetically distinguishable from that of spleen, lung, muscle and liver but not kidney, and the assay of that enzyme in serum was used to diagnose heart tissue damage.

Quantitative Species Differences

Quantitative species differences with drugs could be influenced by differences in the nature of the biotarget or in the rate of absorption, distribution, metabolism or excretion of the drug. Qualitative differences in drug action between species were not so frequent but when encountered could be disturbing and were difficult if not impossible to predict. Some qualitative species differences that could be attri-

buted to the enzymes of drug metabolism were observed when a species was deficient in a particular enzyme (e.g. the cat was deficient in UDP transglucuronylase, the enzyme catalysing the transfer of glucuronic acid to a large number of drugs and their metabolites). In species from other than mammalia qualitative differences became more numerous and many became explicable when it was realised that the animals were deficient in some if not all drug metabolising enzymes. In general neither fish nor amphibia were able to oxidise drugs. Aquatic amphibia however could form glucuronides and ethereal sulphates. It was only in considering animals that spent a considerable part of their time out of water that species with the ability to oxidise drugs were found.

Evidence from Lipid Solubility

The importance of the microsomal enzymes was emphasised by the observation that most of the differences occurred with compounds of high lipid solubility. The poorly lipid-soluble compounds were much more predictable mainly, it was suspected, because they were less likely to be extensively metabolised, as lipid solubility was necessary if the drug was to reach the enzymes within the microsomal membrane.

Variation in the rates of absorption, distribution and excretion might also play a part in difference in drug action between species. An example of toxicity apparently related to absorption occurred when griseofulvin was added to the diet of mice at a concentration equivalent to about 1 gm/kg daily. Marked enlargement of the liver and pronounced disturbance of porphyrin metabolism occurred. The effect had not been observed in rat, guinea pig, rabbit or man and could only be detected in the mouse when the drug was administered in the diet. Under those conditions it appeared, the drug was more effectively absorbed, giving rise to a higher tissue concentration and thus greater toxicity.

The rate of metabolism of hexobarbitone, antipyrine, and aniline varied greatly from one species to another and there was no apparent consistent correlation between the rate of metabolism and the size of animal. That indicated that prediction of the metabolic half life of a drug in any particular species was not really feasible although some indication of what must be avoided in man could be gained from metabolic studies.

Animal studies with meperidine, had indicated that it should be free from tolerance and addiction and that toxic side effects would be minimal. It could however produce quite disturbing side effects in man. The difference could be explained by difference in the rate of metabolism and if, in the initial animal investigation, the drug had been administered more frequently and in higher doses than some aspects of the human toxicity would have been observed.

Not all differences in metabolic rates were related to toxicity. Knowledge of the metabolic half-life of phenylbutazone in different species made possible

the demonstration of certain biological properties of the drug in several species of experimental animals, allowing a dosage schedule for each species to be obtained that would give equivalent drug plasma concentrations. Under those conditions the particular activity could be demonstrated in the different species and had proved important in treating arthritis in race horses.

Phenacetin, although remarkably free of toxicity in man, was toxic in dogs due to the formation of methaemoglobin by deacetylation to form the free amine. Accumulation of that amine led to the formation of methaemoglobin. With this drug, the dog demonstrated one of the metabolic limitations that set it apart from other mammalia; dogs being deficient in the enzyme for the acetylation of aromatic amines although they did possess the ability to de-acetylate acetylated aromatic amines. That deficiency was important as many drugs were aromatic amines and the dog was a common species to use in the toxicological evaluation of new drugs.

The dog and rat also showed certain basic differences in the enzymic capability of the liver. In the rabbit amphetamine was de-aminated whereas in the dog and rat it was hydroxylated. Microsomes from the dog and rat contained a heat-labile inhibitor (unidentified) of the deamination of amphetamine and when microsomes from those species were added to those of rabbit liver the rabbit preparation could no longer deaminate amphetamine.

Effect of Hormones

In some species microsomal activity was undoubtedly affected by the hormonal balance of the animals. Many drugs were known to exert a cyclic variation in potency throughout the year—almost certainly under hormonal control. Pretreatment of female rats with testosterone decreased the sleeping time following hexobarbital administration and increased the microsomal enzyme activity to values similar to those observed in the male rat. Some species differences in drug action might therefore be related to variation in the activity of the microsomal enzymes that was actually controlled by the activity of one or other of the hormone secreting organs.

In newborn and foetal rabbits, starved mice and rats, rabbits with obstructive jaundice, rats with alloxan-induced diabetes, in liver regeneration after partial hepatectomy, and in various types of hepatic tumours the rate of metabolism of various drugs was considerably lower than in the normal adult. This was associated with a low concentration of active enzyme and not with the presence of inhibitors or the absence of activators or co-factors. Pretreatment of such animals, except the foetal rabbit and those with hepatic tumours, with other drugs could enhance the enzyme activity, showing that they had the intrinsic ability to metabolise drugs but some control mechanism had set the level of microsomal enzyme synthesis below normal. Some quantitative differences in drug action might similarly reflect a difference in the setting of the control

mechanism for the synthesis of a particular drug enzyme, or groups of enzymes.

The emphasis on differences had made it difficult to highlight the many instances where drug action was species independent, said the speaker, and he went on to discuss how attempts were made to minimise the effect of species differences in extrapolating animal derived data to man.

ICI 33,828 inhibited pituitary gonadotropic action at very different doses in different species, the doses corresponding closely with those required to produce a concentration of drug in the blood of 3 µgm./mil. No correlation with differences in toxicity or metabolism had been found but it seemed reasonable that with a compound showing such an effect that toxicity should be related to blood level of the drug in the different species rather than to the dose. If that were so, then after low dose trials in man, one could predict the toxic dose in man.

Not all differences in metabolic pattern necessarily led to species variation in drug action. From pronethalol, for example, the guinea pig excreted mainly acid metabolites whilst the mouse excreted mainly neutral metabolites. In spite of that considerable variation in the metabolic pattern the metabolic half-life of the drug did not vary greatly from one species to another and the ratio of doses required to produce a certain concentration of the drug in the blood was probably equivalent to the ratio of the therapeutic doses in the different species. With such a drug the metabolic pattern was of little importance and the actions of the drug were more properly related to its concentration in the blood rather than to the doses in the different species.

A final example emphasised the importance of confirming that the drug under study was not excreted so rapidly by one species that potential toxicity escaped observation.

General Rules

The speaker gave three general rules he attempted to apply in the development of a drug.

1) A method should be developed for its estimation in blood and used to demonstrate the relationship, if any, between blood concentration and biological activity. That should be done in as many species as possible to confirm the relationship. The dosage schedule used in the animal species used for toxicity test should be shown to give a blood level curve of the type believed to produce maximum therapeutic effect in man.

2) An attempt must be made to relate the observed toxicity in different species to the kinetics of absorption, distribution, metabolism and excretion in the same species under similar conditions. The possibility of enzyme induction should be investigated.

3) If toxicity was apparently unrelated to concentration blood, tissues or excreta in different animal species some attempt must be made to relate it to the occurrence of a metabolite (which need not necessarily be identified).

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are augmented before wholesale dealers receive the goods into stock.

LONDON, SEPTEMBER 14: Price movements in CRUDE DRUGS during the week were more numerous than in previous weeks but the changes, mainly upward, did not reflect any increased buying activity.

CURACAO ALOES after a long period of stability moved up 10s. cwt., for spot and forward. With Jamaica not offering GINGER for shipment spot holders raised their quotations by 10s. cwt., Jamaican SARSAPARILLA moved up another threepence per lb. on the spot; there were still no offers from origin. ACONITE was also dearer by twopence per lb. and there were upward adjustments made in CARDAMOMS. Among the items which showed a fall were DANDELION ROOT (down 5s. cwt.); Brazilian MENTHOL for shipment (down 2s. 6d. lb.); COPAIBA BALSAM for shipment (down one shilling); BELLADONNA LEAVES and HERB and SLIPPERY ELM BARK (ninpence lb.). MERCURY was quoted at £165 per flask against a range of £155-£165 recently.

Among ESSENTIAL OILS lower prices were being quoted for CANANGA, Ceylon CINNAMON LEAF and Madagascar CLOVE LEAF. Chinese and Brazilian PEPPERMINTS for shipment at 12s. 6d. per lb., c.i.f., were both down threepence. Italian "Mitcham" type oil was reported firm and scarce whilst the American *Piperita* was easier in anticipation of the new season's crop. That crop has been reported to be a good one but much of it has been booked on contract leaving less for the market than at first expected. American SPEARMINT supplies are similarly placed but prices are tending to be firmer. The new season's crop of LAVANDIN has been better than in recent years and holders have reduced their prices. There has also been a good LAVENDER crop in France, but because of a small carry over of oil from the previous year the price movement has so far been small.

In PHARMACEUTICAL CHEMICALS one manufacturer has increased the price of MERCURY SALTS to bring them in line with the higher prices of the metal. Synthetic VITAMIN E (tocopheryl acetate, is being reduced by 55s. per kilo on September 19, making the 1.9 kilo worth £15 5s. per kilo. With the hydrocarbon oil duty being reduced by one-third at the beginning of the month the duty on PARAFFIN LIQUID has come down from threepence per gall. to twopence. The special surcharge of 10 per cent. imposed in July therefore also comes down from 0.3d. to 0.2d. per gall. Paraffin jellies are not affected.

Pharmaceutical Chemicals

Where material is of foreign origin prices given below may be subject to import surcharge.

ACETANILIDE.—Crystals, one-cwt. lots, 3s. 6d. per lb.; 5-cwt., 3s. 5d.

ADRENALINE.—(Per gm.). Synthetic B.P., 1-kilo lot, 1s.; 500 gm. is 1s. 2d. ACID TARTRATE, B.P., 1 kilo, 8½d.; 500 gm., 10d.

ALON.—Micro-crystalline, 14-lb. lots, 34s., per lb.

ALUMINIUM CHLORIDE.—Pure, in 50-kilo kegs, 5s. 10d. per kilo.

AMINACRINE HYDROCHLORIDE.—B.P. is £24 per kilo.

AMMONIUM ACETATE.—Kegs (70-kilos), B.P.C. 1949, 8s. 1d. per kilo. SOLUTION (200-kilo drums) strong, 3s. 6d. per kilo.

AMMONIUM BICARBONATE.—B.P. powder £54 10s. per ton; CARBONATE, £83 10s. for lump and £87 10s. for powder. All in 1-cwt. free kegs.

AMMONIUM CHLORIDE.—50-kilo lots pure powder, 2s. 1d. per kilo in paper sacks.

AMMONIUM NITRATE.—Crystals, 2s. 0½d. per kilo in 50-kilo lots, technical grade.

AMMONIUM SULPHATE.—50-kilo lots, 2s. 4½d. per kilo for B.P.C. 1934 grade.

ANTIMONY SALTS.—TRICHLORIDE, SOL., B.P.C., 1934, carboys, 6s. 1d. per kilo; FLAKE, 14s. 4d. per kilo.

BENZYL BENZOATE.—B.P. in 1-ton lots, 4s. 8d. to 4s. 9d. per lb. as to container.

BISMUTH SALTS.—(Per kilo):—

Quantity	Under 50	50	250
CARBONATE ...	77 10	76 0	75 0
SALICYLATE ...	72 4	70 6	—
SUBGALLATE ...	67 10	66 0	—
SUBNITRATE ...	71 10	70 0	69 0

BROMIDES.—Crystals (per kilo):—

	Under 50 kilos	50 kilos
POTASSIUM*	s. d.	s. d.
SODIUM ...	6 3	5 8
AMMONIUM ...	6 3	5 8
	7 2	6 7

*Powder is fourpence per kilo more.

CALAMINE.—50-kilo lots, 4s. 3½d. per kilo; 1,000 kilo, 4s. 2½d. kilo.

CALCIUM CARBONATE.—B.P. light precipitated powder, 1-ton lots, £37 10s. per ton in free bags, ex works. PREPARED powder, £22 10s. per ton.

CALCIUM CHLORIDE.—Fused, 3s. 11d. per kilo in 12½-kilo tin for 100-kilo lots.

CALCIUM GLUCONATE.—1.4 cwt., 4s. 3d. lb.; 1-ton, 4s.

CALCIUM LACTATE.—B.P. is £412 per 1,000 kilo for 250-kilo lots.

CANTHARIDIN.—Per oz. 327s. 6d. for 4-oz. lots.

CARMINE.—One-cwt. lots are quoted at 180s. per lb.

CHARCOAL.—Medicinal activated, B.P.C. in 1-cwt. lots, £22 10s. per cwt.

CHLORAL HYDRATE.—One-cwt. lots quoted at 4s. 4d. per lb.

CHLOROCRESOL.—Pharmaceutical quality, 7s. 7d. per lb. (1-cwt. lots).

CHLOROFORM.—35-litre lots in winchesters, B.P., 11s. 5½d. per litre; in drums, 10s. 7d; 175-litre lots, 11s. and 10s. 1½d.

CHLOROPHYLL.—Water-soluble, 100 per cent. (medicinal grade), 250s. per lb.; oil soluble, 25s. per lb.

CHLOROXYLENOL.—B.P.C. 5s. 10d. per lb. for 1-cwt. lots.

CITRATES.—(Per kilo):—

	50 kilos	250 kilos	1,000 kilos
	s. d.	s. d.	s. d.
SODIUM ...	5 4	4 10	4 8
POTASSIUM...	5 7	5 1	4 11
IRON AND AMMONIUM	9 8	9 4	9 1

CREAM OF TARTAR.—Home-trade:—One-ton lots, 241s. per cwt.; 10-cwt., 242s.; 5.9 cwt., 243s.; 2.4 cwt., 244s.; 1-cwt., 245s. (If supplied in bags deduct 5s.)

CREOSOTE.—B.P.C., 1959, ex beechwood, 100 kilos, 16s. 6d. per kilo; 500 kilos, 16s.

CRESOL.—B.P. quality, 7s. 9d. per gall. in 5-gall lots.

IODOFORM.—Powder (per kilo), 55s. 3d. in 50-kilo lots; less than 50 kilos, 56s. 9d. Crystals are 6s. 6d. per kilo more.

KAOLIN.—Light, 500 kilos, 1s. 2d. per kilo and 1,000 kilos, 1s. 1½d.

MERCUROCHROME.—250-gm lots are 147s. per kilo; 1-kilo, 127s.

MERCURY SALTS.—Per kilo for under 50-kilo lots—AMMONIATED powder, 124s. 10d.; PERCHLORIDE, 107s.; SUBCHLORIDE, 123s. 4d.; OXIDES, yellow, 128s. 4d. and red, 133s. 4d.; IODIDE (25 kilo lots), 92s. 10d.

MERSALYL.—ACID, 250s. per kilo; SODIUM, 340s.

PARACETAMOL.—One-ton lots are 10s. 2d. per lb.

PARAFFINS.—Prices to wholesaler distributors per gal. delivered in drums.—Liquid HEAVY B.P., 8s. 7½d. for over 5-drum lots; 5 drums and under, 8s. 8½d. LIGHT B.P., 7s. 0½d. and 7s. 1½d. for same quantities. Technical white: LIGHT, 6s. 5d. and 6s. 6d.; MEDIUM, 7s. 6d. and 7s. 7d. All subject to 0.2d. per gall. Government surcharge. Drums charged and returnable. Soft: Best grades WHITE medium consistency, £116 15s. per ton and soft consistency, £113 7s. 6d.; YELLOW, £94 10s. Other B.P. grades at £95, £100 10s., £106 per ton for white and at £74 17s. 6d. for yellow. All in non-returnable drums delivered.

PHENACETIN.—B.P. one-ton lots, 6s. 3d. per lb.; 1-cwt., 6s. 9d.

PHENAZONE.—Imported, 9s. 6d. per lb.

Industrial Chemicals, Solvents

ACETALDEHYDE.—The 100 per cent. is £122 per ton minimum 1-ton lots.

ACETATES.—Per ton, spot in drums: AMYL, technical, £251 and B.S., £253. BUTYL, £128; ETHYL, £103; ISOBUTYL (80 per cent.), £105 and pure, £108; ISOPROPYL, £110; METHYL, 80 per cent., £142.

ACETIC ANHYDRIDE.—12-ton lots £103 per ton; 2½-ton, £107, tanker deliveries.

ACETONE.—One-ton lots spot £68 per ton in drums.

N-BUTYL ALCOHOL.—One-ton lots in drums, £123 per ton and one-drum lots, £132 per ton.

CARBON TETRACHLORIDE.—Four-ton lots, in drums £84 per ton.

HYDROCHLORIC ACID.—Commercial grade £17 2s. 9d. per ton ex works, in carboys.

ISOPROPYL ALCOHOL.—Technical grade (99 per cent.) in tank car lots from 4s. 6d. to 4s. 8d. per gall.; anhydrous in drums, 7s. 1d. to 7s. 4½d. per gall.; in bulk, 6s. 11d. to 7s. 1d.

METHYL ETHYL KETONE.—One-ton lots, £103 per ton.

NAPHTHALENE.—Contract rates for large quantities of phthalic grade are about £24 per ton in bulk, ex works.

PHTHALATES.—Prices (per ton) one-ton lots in drums: DI-BUTYL, £153; DI-ISOBUTYL, £148; DI-ETHYL, £171; DI-METHYL, £161.

PHTHALIC ANHYDRIDE.—Domestic material ex contract, £93 5s. per ton.

SODA ASH.—Four-ton lots, from 330s. per ton delivered.

STEARATES.—Minimum 1-ton lots, ALUMINIUM (No. 1), £243 10s. per ton and (non-gel.), £281; CALCIUM (precipitated), £243 10s.; LEAD (30 per cent.), £245; MAGNESIUM (standard), £257 and (super-fine), £287. ZINC, £246 to £276 as to grade.

Crude Drugs

ACONITE.—Spot, Spanish *napellus*, 2s. 6d. per lb.; shipment, 2s. 4d., c.i.f.

AGAR.—Kobé No. 1, 23s. 6d. per lb. in bond; shipment, 23s. 6d., c.i.f.

ALOE.—(Per cwt.). Cape primes, spot, 245s.; shipment, 240s., c.i.f. and Curacao, 280s. spot shipment, 275s., c.i.f.

ANISE.—Chinese star, 150s. per cwt. spot, duty paid; f.a.q. for shipment, 120s., c.i.f.

BALSAMS.—(Per lb.): CANADA: Shipment, 27s. 6d., c.i.f.; spot, 27s. 6d. COPAIBA: B.P.C. spot, 13s.; shipment, 9s., c.i.f.; PERU: again dearer at 18s., spot; shipment, 17s. 6d., c.i.f.; TOLU: B.P., from 12s. 6d.

BELLADONNA.—LEAVES, 5s. 6d. per lb., spot; shipment, October-November new crop, 4s. 6d. c.i.f. HERB, 3s. 9d., spot. ROOT, 1s. 8d. per lb., spot; shipment, 1s. 7d., c.i.f.

BENZON.—Sumatra block, spot from £20 to £40 as to quality.

BUCHU.—Spot, 8s. 6d. per lb. shipment cleared.

CALUMBA.—Mozambique root, 125s. per cwt. spot.

CAMPOR.—B.P. powder for shipment, 4s. 4½d. per lb., c.i.f.; spot, 5s. 9d., duty paid.

CARDAMOM.—(per lb.). Alleppy greens, 32s. 6d. spot, afloat 22s., c.i.f. Prime seed for shipment, 32s. 6d., c.i.f., spot 37s. 6d.

CASCARA.—Spot, 245s. per cwt.; shipment, new peel offered at 245s., c.i.f.

CASSIA.—*Lignea*, whole for shipment, 230s. cwt., c.i.f.; spot, 300s., duty paid.

CHAMOMILE.—Belgian flowers, 15s. to 16s. per lb., spot; German type, 7s. 6d.

CHERRY BARK.—Thin natural, on spot from 3s. 4d. per lb.; shipment 3s. 3d. c.i.f.

CHILLIES.—Zanzibar, spot, 380s. per cwt., shipment, 300s., c.i.f.; Mombasa, 385s., spot; shipment, 350s., c.i.f.

CINCHONA.—Ecuador bark, 8·07 per cent. t.a., offered at 2s. 6d. to 2s. 9d. per lb. as to quantity.

CINNAMON.—BARK, Seychelles, 135s. cwt. spot; shipment, 107s. 6d., c.i.f.; QUILLS Ceylon (per lb., c.i.f.); Five O's, 10s. 3d.; firsts, 7s. 10d.; seconds, 7s. 8d.; quillings, 4s. 6d.

CLOVES.—Zanzibar, standard grade, spot quoted at 2s. 10½d. per lb.; shipment, 2s. 7½d. c.i.f.

COCHINEAL.—(Per lb.). Canary Isle silver-grey, 15s. 6d. spot, 14s. 6d. c.i.f.; black brilliant, 17s. 6d., spot, 16s. 6d., c.i.f. Peruvian silver-grey, 13s., spot, and 12s. 6d., c.i.f.

COCILLANA.—Bark, 3s. to 3s. 3d. per lb., as to holder.

COLOCYNTH PULP.—Spot offered at 4s. 3d. per lb., shipment, 4s. c.i.f.

DANDELION.—Root is 160s. per cwt., spot.

ERGOT.—Portuguese—Spanish, spot, 11s. per lb.; shipment 10s. 6d., c.i.f., nominal. Continental, 9s., spot.

GENTIAN.—Root, 195s., per cwt. spot; shipment, 190s., c.i.f.

GINGER.—(Per cwt.). Nigerian split, 75s., spot; no c.i.f. offers; peeled, 195s., spot and 170s., c.i.f. African, spot, 230s., shipment, 210s., c.i.f. Jamaican No. 3, spot, 270s., shipment, not offering; Cochinchina, spot, 230s.; shipment, 197s. 6d., c.i.f.

GUM ACACIA.—Kordofan cleaned sorts, 182s. 6d. per cwt., spot; shipment, 170s., c.i.f.

HONEY.—(Per cwt.). Australian light amber, spot, 120s. to 125s.; and medium amber, 110s. to 115s. Argentine, 125s. to 130s.; Canadian, 175s. to 180s.; Mexican spot, 110s. to 115s.

HYDRASTIS.—Spot is 27s. 6d. with shipment offers at 27s., c.i.f.

IPECACUANHA.—Matto Grosso for shipment, 53s. 6d. per lb., c.i.f. and spot, 56s. Costa Rican 65s. 6d., spot; shipments, 62s., c.i.f. Colombian, shipment, 55s., c.i.f.

JALAP.—Mexican whole bulbs, 4s. per lb. on spot; shipment, 3s. 9d., c.i.f. Brazilian, 1s. 9d., c.i.f.

KARAYA.—No. 1. f.a.q. gum, spot, 415s.; No. 2., 300s. per cwt.

KOLA NUTS.—West African halves are 7½d. per lb. on the spot; shipment, 7d. c.i.f.

LANOLIN.—ANHYDROUS, B.P., is from 2s. 4½d. to 2s. 8d. per lb. in 1-ton lots delivered free drums. Commercial grades from 1s. 7½d.

LEMON PEEL.—Spot, 1s. 9d. per lb.; partially extracted, 1s.

LIME FLOWERS.—Spot 2s. 2d. per lb.

LIQUORICE.—Natural root; Russian, 67s. 6d. per cwt.; Anatolian, 57s. 6d.; Anatolian decorticated, 170s. Black juice: Anatolian, 210s. to 220s. per cwt.; Italian stick from 395s. to 460s. per cwt.

LOBELIA.—Dutch on the spot, 4s. 6d. per lb.; shipment, 4s. 3d. c.i.f. American, 12s. per lb. spot and 11s., c.i.f.

LYCOPodium.—Indian triple-sifted, 8s. 6d. per lb., spot.

MACE.—Whole No. 1, 14s. per lb., f.o.b. for forward delivery.

MENTHOL.—(Per lb.). Chinese for shipment, 33s. 6d., c.i.f.; spot, 38s. duty paid Brazilian for shipment, 35s., c.i.f.; spot, 39s., duty paid.

MERCURY.—Spot £165 per flask of 76-lb., ex warehouse.

NUTMEGS.—(Per lb.). West Indian, spot, defectives, 7s. 3d.; sound unsorted, 8s. 6d., East Indian spot; b.w.p., 6s.; shipment, 4s. 7½d., c.i.f.; 110's, 9s. 3d., c.i.f.; 80's 10s. 3d., c.i.f.

NUX VOMICA.—Cochin, 110s. per cwt. on the spot; shipment, 80s., c.i.f.

ORANGE PEEL.—Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 4s. 9d.

PEPPER.—White Sarawak, 3s. 9d. lb. spot; shipment, 3s. 7d., c.i.f. Black Sarawak, 3s. 1½d., spot; shipment, 2s. 9½d., c.i.f. Brazilian grade one spot, 3s. 3d., duty paid. Black Malabar, spot not available; shipment, 330s. cwt., c.i.f.

PIMENTO.—Nominally, 740s. per cwt., c.i.f. on allocation.

PODOPHYLLUM.—Spot per cwt.: *Emodi* 205s., spot; shipment, 180s., c.i.f.

QUILLAIA.—Spot 185s. per cwt., shipment 180s., c.i.f.

RHUBARB.—Various grades offered at from 6s. to 19s. 6d. per lb. spot.

SAFFRON.—Mancha superior, spot, 750s. per lb.; Rio, 720s.

SARSAPARILLA.—Jamaican native red, spot, 4s. per lb.; shipment not offering.

SEEDS (Per cwt.). ANISE.—Spanish, 240s. Turkish, 187s. 6d. both duty paid. CARAWAY.—Dutch, 155s., spot. CELERY.—Indian unchanged at 147s. 6d. spot; shipment new crop for September-October, 135s., c.i.f.

CORIANDER.—No Moroccan offering on spot; Rumanian whole seed, 82s. 6d. and splits, 70s., both duty paid; Moroccan for shipment quoted at 89s., c.i.f. CUMIN.—Spot: Cyprian, 290s.; Indian, 292s. 6d., Moroccan, 290s., duty paid; shipment Cyprian, 250s., c.i.f. DILL.—Indian, 112s. 6d., spot; shipment, 80s., c.i.f. FENNEL.—Chinese, 125s., duty paid; shipment Chinese, 110s., Indian, 122s. 6d., c.i.f. FENUGREEK.—Moroccan, 80s., duty paid sellers; shipment, 67s. 6d. c.i.f. MUSTARD.—English, 52s. 6d. to 90s., according to quality.

SENEGA.—Spot is 29s. per lb. nominal; shipment nominally, 28s., c.i.f.

SLIPPERY ELM BARK.—Spot offered at 3s. 9d. per lb.

SQUILL.—Italian, spot, 120s. per cwt.; shipment, 110s., c.i.f.

STRAMONIUM.—Continental LEAVES, 85s. per cwt., spot.

WITCH HAZEL LEAVES.—Spot supplies cleared; shipment, 5s., c.i.f.

Essential and Expressed Oils

ALMOND.—Spanish sweet oil is 6s. 6d. per lb. spot.

AMBER.—Rectified on the spot, 1s. 6d. per lb.

ANISE.—Chinese, 9s. 4d., spot, shipment, 8s. 11d., c.i.f.

BAY.—From 41s. per lb. on the spot.

BERGAMOT.—Spot, from 167s. per lb. for 35 per cent.

CAJUPUT.—Spot from 10s. 6d. to 14s. per lb.

CALAMUS.—Spot from 55s. to 60s. per lb.

CAMPOR, WHITE.—Chinese for shipment, 4s. 4d., c.i.f., per kilo; spot, 2s. 6d. lb., duty paid.

CANANGA.—Spot from 37s. per lb.

CARAWAY.—Imported from 56s.; English distilled from 70s. per lb.

CARDAMOM.—Imported, 610s. per lb.; English distilled, 950s.

CASSIA.—Spot from 30s. to 35s. per lb. for 80-85 per cent.

CASTOR.—Home produced B.P. oil, spot, £140 per ton naked ex mill (2-ton lots).

CINNAMON.—English-distilled, 50s. per oz.; other B.P. oils from 22s. to 130s. per lb. Ceylon leaf, 23s.; Seychelles leaf rectified from 9s., spot.

CLOVE.—Madagascar leaf for shipment, 6s. 10½d., c.i.f., spot, 6s. 10½d., in bond. Rectified, 10s. Distilled bud oil, ENGLISH, B.P., 26s. per lb. for 1-cwt. lots.

GERANIUM.—Bourbon, 87s. 6d. to 92s. 6d., spot; Algerian, 75s.

GINGER.—Imported (per lb.): Indian, 165s.; Chinese, 75s.; Jamaican, 132s. 6d.

GRAPEFRUIT.—Spot quoted at 7s. per lb. Floridan, 10s., West Indian unobtainable on spot.

JUNIPER.—B.P.C. is 38s. per lb.

JUNIPER WOOD.—From 6s. per lb.

LAVANDIN.—From 23s. 6d. per lb. as to quality.

LAVENDER.—French from 40s. to 60s. per lb. as to quality.

LAVENDER SPIKE.—From 32s. per lb. on the spot.

LEMON.—Sicilian from 26s. to 36s.

LEMONGRASS.—Spot, 25s. per kilo; shipment, 23s. 9d., c.i.f.

PEPPERMINT.—(Per lb.). *Arvensis*: Chinese for shipment, 12s. 6d., c.i.f.; spot, 12s. 6d. Brazilian for shipment, 12s. 9d., c.i.f.; spot, 12s. 9d. *Piperita*: Italian spot, 75s.; forward shipments, 82s. 6d. American from 36s. to 49s., as to source.

SAGE.—Spanish, 21s. per lb.; Dalmatian 26s.

SANDALWOOD.—Mysore, spot, 107s. 6d. per lb. East Indian for shipment, nominal.

SPEARMINT.—American oil on the spot, 72s. 6d. per lb. Chinese, 71s. per kilo, c.i.f.

TANGERINE.—Sicilian best quality about 40s. per lb.

UNITED STATES REPORT

NEW YORK, SEPTEMBER 13: Feature of the fine chemicals was a seven-cent reduction in the price of cyclamates. The reduction in cyclamates brings the price level to 57 cents a lb. for truck load quantities and 60 and 62 cents for ton and less-than-ton lots, respectively. BRAZILIAN MENTHOL was lower by ten cents at \$5.75 a lb., duty paid.

In CRUDE DRUGS there was a five-cent decline in COPAIBA BALSAM to \$1.10 per lb. Among ESSENTIAL OILS was a five-cent rise in BOIS DE ROSE to \$2.65 per lb.

WORLD TRADE

French Chemical Industry.—French chemical industry's foreign trade surplus fell in the first half of 1966 to NF69m. (from NF125 million in the same 1965 period, according to provisional figures issued here. Exports increased 14.7 per cent to NF2,294m. against 20 per cent. rise the year before, while imports rose 18.6 per cent. to NF2,225m. (against 11 per cent.) Production, however, showed a 9.2 per cent. growth rate compared with 8.2 per cent. the previous year.

Growth in E.F.T.A. Trade.—The satisfactory results of freeing trade between countries in the European Free Trade Association (E.F.T.A.) are recorded in the Association's annual report published on September 13. The final abolition of E.F.T.A. tariffs on industrial goods will be completed this December 31, three years ahead of the original schedule. Trade between the eight E.F.T.A. countries has approximately doubled since 1959 and has even increased by 150 per cent. between the four Nordic countries. Trade between E.F.T.A. countries has grown by an average of nearly 12 per cent. a year since 1959, compared with the annual rate of 5.6 per cent. which prevailed in the six years before 1959.

German Chemical Industry.—West German chemical-industry investment expenditure is likely to be high again this year. Orders currently in hand total more than DM3,000 million and business expansion is forcing companies to develop and rationalise production, according to the industry's Federation. In 1965 expenditure of DM3,800 million was DM1,000 million more than in 1964 and accounted for 15 per cent. of all West German industrial production. The chemical industry raised 1966 first-half turnover by 8.5 per cent. to DM17,900. Exports were up 15 per cent. at DM5,600 million accounting for 3.13 per cent. of total sales. Pharmaceuticals exports increased by 12.9 per cent. to DM2,600 million (DM2,300).

EXPANSION PROJECTS

UNITED Coke and Chemicals Co., Ltd., and the coal products division of the National Coal Board are to build a joint venture a new plant for the manufacture of phthalic anhydride. The plant will be sited at Staveley, Derbyshire, and is planned to go on stream during 1968. It will cost in the region of £2 million and will have a capacity of 20,000-25,000 tons a year.

The new laboratory apparatus division of James A. Jobling & Co., Ltd., which became operational on September 5, is being housed in a £500,000 factory and office block, with a production area of 100,000 sq. ft. at Deptford, adjacent to the main Wear glass works. All activities affecting laboratory glassware—manufacturing, marketing, research and development—will soon be concentrated under one roof. The factory, on which building work began in January, goes into full production by October. About 300 are employed in the new division. The general manager of the division is Mr. Leslie Morrell.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED

From the "Official Journal (Patents)," Sept. 7

Photographic material for the silver dyestuffs bleaching process. CIBA, Ltd. 1,045,705.

Method of preparing amino alkyl sulphates. Interchemical Corporation. 1,045,718.

Water-soluble hydroxylated carbonylated and carboxylated derivatives of the essential oils, especially of pine, copuput and eucalyptus. R. Trarieux. 1,045,726.

Photographic enlarging apparatus. W. R. Heckie. 1,045,740.

Processes for preparing steroid compounds and products obtained by these processes. Roussel-Uclaf. 1,045,760.

Photographic light-sensitive materials. Ilford, Ltd. 1,045,777.

Liquid liquid chromatography. Pyc, Ltd. 1,045,801.

Oxazolidinyl sulfones. J. T. Baker Chemical Co. 1,045,804.

Dibenzocycloheptenyl - amines. Koninklijke Pharmaceutische Fabrieken V/H Brocades-Stheeman & Pharmacia, N.V. 1,045,811.

2-oxazoly-5-aryl-thiophene compounds and process for their manufacture. CIBA, Ltd. 1,045,818.

Isoxazoles and process for preparing some. CIBA, Ltd. 1,045,819.

2-substituted thiophen derivatives. Pfizer, Ltd. 1,045,838.

Bacteriological sampling set. Nunc A/S. 1,045,845.

10a-steroids and process for their manufacture. CIBA, Ltd. 1,045,856.

Rotatable knob for cameras. Kodak, Ltd. 1,045,882.

Process for the production of hydantoin derivatives. Chemische Werke Hüls, A.G.

Amino substituted phosphonic acid esters. Rohm & Haas Co. 1,045,892.

Dibenzoxazepines. A. Wander, S.A. 1,045,903.

Cycloheptene derivatives and their preparation. Pfizer, Ltd. 1,045,911.

1-(2,4-dimethylphenyl)-2-pyrrolidinobutane and acid addition salts thereof. K. Thomae, G.m.b.H. 1,045,927.

Packaging infection carrying substances. Nunc A/S. 1,045,952.

Tampon applicators. Robinson & Sons, Ltd. 1,045,962.

Sodium betaine aspartate. Laboratories Albert Rolland. 1,045,969.

5,10-seco-5, 19-cyclo-10-fluoro steroids. Syntex Corporation. 1,045,970.

Indole derivatives. Byk-Gulden Lomberg Chemische Fabrik, G.m.b.H. 1,045,988.

Propanolamine derivatives. Imperial Chemical Industries, Ltd. 1,046,001.

Pyrimidinopyrimidothiazine compounds and/or thiazine compounds and production thereof. Shionogi & Co., Ltd. 1,046,044.

Ureic derivatives. A. Wander, S.A. 1,046,045.

Benzimidazolyl piperidines. Janssen Pharmaceutica, N.V. 1,046,053.

Steroid compounds and method of preparing the same. American Cyanamid Co. 1,046,055.

Photographic pivoted blade shutter. Agfa, A.G. 1,046,063.

Bactericidal composition. Coalite and Chemical Products, Ltd. 1,046,164.

Amine salts. Bristol-Myers Co. 1,046,167.

Substituted cyclic ethers and process for their preparation. International Flavours & Fragrances, Inc. 1,046,170.

Process for the production of N,N'-disulphonyl-1, 3-diazacyclo alkanes. Farbenfabriken Bayer, A.G. 1,046,174.

1-glycosyl-5-ozacytosines. Ceskoslovenska Akademie Ved. 1,046,181.

Pharmaceutical compositions comprising benzyl theophylline derivatives. Manufacture de Produits Pharmaceutiques A. Christiaens, S.A.

Insecticidal compositions. Shell Internationale Research Maatschappij, N.V. 1,046,209.

Substituted tetrahydroquinolines. Karl Thomae, G.m.b.H., 1,046,226.

Substituted tetrahydrophenyl nitrogen mustards. Sandoz Patents, Ltd. 1,046,234.

Steroid compounds and the preparation thereof. Research Institute for Medicine & Chemistry, Inc. 1,046,242-43.

Substituted imidazoles. Benger Laboratories, Ltd. 1,046,248.

Process for preparing ethionic acid esters and vinyl-sulphonic acid esters. Farbwerke Hoechst, A.G. 1,046,253.

4-carboxyalkylmercapto-5-aryl pyrimidines and o method for their preparation. Spofa, Sdruzeni Podniku pro Zdravotnickou Vyrobu. 1,046,258.

Azepine derivatives and processes for their production. J. R. Geigy, A.G. 1,046,260.

Process for the production of a substance capable of activating the fibrinolytic proenzymes present in blood. Laboratoire Choay. 1,046,266.

Urea manufacturing process. Allied Chemical Corporation 1,046,271.

Tetrazole derivatives. Miles Laboratories, Inc. 1,046,302.

Polypeptides. Soc. Farmaceutici Italia. 1,046,303.

Electric shavers. R. Hirschmann. 1,046,309.

Substituted benzimidazolyl piperidines. Janssen Pharmaceutica, N.V. 1,046,311-12.

Toluene compounds and process for producing the same. Parke Davis & Co. 1,046,319.

Salts of the antibiotic lincomycin. Upjohn Co. 1,046,332.

British patent specifications relating to the above will be obtainable, (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from October 19.

TRADE MARKS

APPLICATIONS ADVISED BEFORE REGISTRATION

"Trade Marks Journal", August 31, No. 4592

For sterilising preparations for use in the food and drink manufacturing industries (5) ETISAN, 884,655, by Hadleigh-Crowther, Ltd., Reading, Berks.

For pharmaceutical preparations and substances for human and veterinary use (5) ORILAN, 886,607, by CIBA, Ltd., Basle, Switzerland.

For pharmaceutical preparations and substances for veterinary use (5) GALLIPAX, 886,931, by CIBA, Ltd., Basle, Switzerland. ZOLAPHEN, 889,922, by Stevenson, Turner & Boyce, Ltd., Reading, Berks.

For pharmaceutical preparations and substances for use in the treatment of mental diseases (5) NURDELIN, 887,738, by Zambon, S.p.A., Milan, Italy.

For vaccines for use in the treatment of cholera in hogs (5) SOOVAC, 887,962, by American Cyanamid Co., Wayne, New Jersey, U.S.A.

For pharmaceutical and veterinary preparations (5) ACOLOC, 888,076, by Crookes Laboratories, Ltd., Basingstoke, Hants.

For insecticides, fungicides, bactericides and preparations for killing weeds and destroying vermin (5) SYLVISAN, 888,302, by Thompson & Capper, Ltd., Liverpool, 24.

For pharmaceutical preparations for the treatment of gastro-intestinal ailments (5) DUOGASTRONE, 888,303, by Biorex Laboratories, Ltd., London, E.C.1.

For insecticides, fungicides and preparations for killing weeds and for destroying vermin (5) LIMMAX, 888,998, by Produx Industries, Ltd., Luton, Beds.

For deodorants (5) PURIFAIR, B889,128, by Esther Kay, London, N.W.4.

For disinfectants; preparations for killing weeds and destroying vermin (5) PESCOZOL, 889,169, FYLENE, 891,136, by Fison's Pest Control, Ltd., Harston, Cambs, Device 885,583, by Union Generale des Petroles, Paris, France.

For pharmaceutical, veterinary and sanitary substances; and disinfectants; all containing quaternary surface active agents (5) LORAQUAT, 889,900, by Dutton & Reinisch, Ltd., London, S.W.7.

For pharmaceutical preparations and substances, all in the form of creams or ointments (5)

HAELAN, 890,032, by Dista Products, Ltd., Speke, Liverpool, 24.

For chlorpropamide preparations for pharmaceutical purposes (5)

CHLORONASE, B890,057, by Farbwerke Hoechst, A.G. Vormals Meister Lucius & Bruning, Frankfurt am Main-Hoechst, Germany.

For cellulose wadding and products made therefrom (5)

KLEENEX, 890,994, by Kimberly-Clark Corporation, Winnebago, Wisconsin, U.S.A.

For insecticides, fungicides and herbicides (5)

TULISAN, 891,031, by Plant Protection, Ltd., London, S.W.1.

For pharmaceutical, veterinary and sanitary substances and preparations; disinfectants (5)

TALUVIAN, 891,499, by Knoll, A.G., Ludwigshafen-on-Rhine, Germany.

For antibiotic preparations (5)

MYSTECLOX, 891,668, by E. R. Squibb & Sons, Ltd., Twickenham, Middlesex.

For electric shavers and parts (8) for photographic apparatus and instruments and parts (9), for surgical, medical and veterinary instruments and apparatus; electric blankets; gloves for surgical use (10) and for combs, sponges and brushes; gloves for domestic use (other than bottling gloves of india rubber) (21)

Device with letter and word C CHEM-PLUS, 890,792-94, 890,796, by John Frank Hart, Dagenham, Essex.

For cinematographic, photographic, optical and measuring instruments and apparatus and parts (9)

CRONICA, 893,039, by Apparatus and Instrument Co., Ltd., Hounslow, Middlesex.

For cameras, photographic and cinematographic projectors, and photographic apparatus (9)

PHOTOSURANCE, 894,183, by Consort Photoplan, Ltd., Ashford, Kent.

For photographic, cinematographic and optical apparatus and instruments, and parts and fittings (9)

RETINAMAT, 894,216, by Kodak, Ltd., London, W.C.2. IMPAR, 894,661, by Imperial Camera Corp., Chicago, Illinois, U.S.A.

For photographic apparatus and instruments and parts (9)

PEREGRINE, 894,451, BUZZARD, 894,453, OSPREY, 894,455, by Ilford, Ltd., Ilford, Essex.

For surgical needles (10)

SPATULOC, 892,208, by Ethicon, Inc., Bridgewater Township, New Jersey, U.S.A.

For brushes, combs, etc. (21)

GRILAMID, 879,030, by Emser Werke, A.G., Domat-Ems, Switzerland.

For diapers and interfacings, all being non-woven textile piece goods; covers for sanitary napkins, etc. (24)

CHICOPEE, 884,928, by Johnson & Johnson, New Brunswick, New Jersey, U.S.A.

"Trade Marks Journal", September 6, No. 4593

For chemical products used in industry and science; chemical products for use in agriculture; and chemical substances for preserving foodstuffs (1)

ROXAPHYLL, 890,916, by Roche Products, Ltd., Welwyn Garden City, Herts.

For chemical products for use in agriculture, horticulture and forestry; manures (natural and artificial) (1) and for preparations for killing weeds and destroying vermin; and insecticides (5)

OGRAN, 891,017-18, by J. R. Geigy, A. G. Basle, Switzerland.

For cosmetics for the hair, none being in liquid form (3)

MISTY HAIR TREAT, 864,253, by Rayette Beauty Products, Ltd., Slough, Bucks.

For cleaning preparations and shampoos (3)

NU-TRIM, B866,401, by P. C. Products (1001), Ltd., Salford, 7, Lancs.

For perfumes and toilet waters (3)

JOLIE MADAME, B867,359, by Parfums Pierre Balmain, S.A., Paris, France.

For perfumes, toilet waters, non-medicated cosmetic preparations, non-medicated toilet preparations, toilet soaps and shampoos (3)

GRECAUX, 885,695, by Merton Jan Behrman, London, N.W.9.

For perfumes (3)

MA VIE, 887,725, by Oriental Perfumery & Cosmetics, Ltd., Brighton, Sussex. SAINT OR SINNER, 887,861, by R. J. G. Perfumes, Ltd., London, E.1.

For substances for laundry use, cleaning preparations, detergents (not for use in industrial or manufacturing processes) and soap (3)

Device with words A CHAMPION PRODUCT, 887,942, by Plymouth Chemicals, Ltd., Clyst Honiton, Exeter, Devon.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3)

YARDLEY NEXT-TO-NATURAL, 888,762, by Yardley & Co., Ltd., London, E.15.

For dentifrices (3)

GIBBS SHIELD, 889,918, by Unilever, Ltd., Port Sunlight, Ches.

For bactericidal liquid soap (3)

SALUTE-HEX, 890,056, by Deb Chemical Proprietaries, Ltd., Belper, Derbys.

For cosmetic lotions and cosmetic creams (3)

BO-PRICIL, 891,811, by Bourne Private Clinics, Ltd., Farnham, Surrey.

For soaps; and detergents (not for use in industrial or manufacturing processes) (3)

COLWUL, 893,481, by Co-operative Wholesale Society, Ltd., Manchester.

For perfumes, toilet preparations (not medicated), cosmetic preparations, dentifrices, depilatory preparations, preparations for dressing and setting the hair, soaps and essential oils (3)

ANNIVERSARY, 894,096, by Jane Seymour, Ltd., London, W.1.

For deodorants, none being in liquid form (5)

MISTY COOL 'N DRY, 862,478, by Rayette Beauty Products, Ltd., Slough, Bucks.

For pharmaceutical and veterinary preparations and substances, but not including dietetic foods or any foods of the same description (5)

GAMMAN, B883,643, by Stanton & Staveley, Ltd., Stanton-by-Dale, Derbys.

For chemical preparations for killing weeds; and herbicides (5)

INDAC, 885,619, by Amchem Products, Inc., Ambler, Pennsylvania, U.S.A.

For pharmaceutical preparations and substances (5)

SKIL, B885,912, by Beecham Group, Ltd., Brentford, Middlesex.

CIDO-TULLE, 890,889, by Roussel-Uclaf, Paris, VIIe, France.

ACTOLIN, 893,488, by A. Wander, Ltd., London, W.1.

For pharmaceutical preparations and substances; disinfectants, insecticides, fungicides, preparations for killing weeds and destroying vermin (5)

ARISTAR, 891,102, by The British Drug Houses, Ltd., London, N.1.

For pharmaceutical preparations in the form of sprays for the treatment of ailments of the respiratory tract (5)

BRONCHOMISTER, CORTOMISTER, 891,046-47, by Laboratories J. Berthier, Grenoble, France.

For pharmaceutical preparations, materials prepared for dressing wounds and disinfectants for human use (5)

ROTERSFPT, 891,225, by Pharmaceutische Fabriek Roter, Hilversum, Holland.

For pharmaceutical preparations (5)

KARMOID, 891,324, by International Laboratories, Ltd., Chessington, Surrey.

For veterinary preparations; vitamin and mineral supplements for addition to animal foods (5)

CHEVINAL, 891,561, by U.S. Vitamin & Pharmaceutical Corporation, New York, U.S.A.

For pharmaceutical, veterinary and sanitary substances, bandaging materials and disinfectants (5)

Device with letter O, 891,372, by Onward Pharmaceutical Services, Ltd., London, W.C.1.

For pharmaceutical preparations for human and veterinary use (5)

DOLALGIN, 891,710, by May & Baker, Ltd., Dagenham, Essex.

For pharmaceutical preparations and substances, and deodorants (5)

ISLANDER, 891,983, by Stanley Home Products, Inc., Westfield, Massachusetts, U.S.A.

For antibiotics and preparations containing antibiotics (5)

HETAPEN, 892,461, by Bristol-Myers Co., New York, U.S.A.

For pharmaceutical preparations in tablet form for use in the treatment of asthma and hay fever (5)

PHYLDROX, 892,690, by Carlton Laboratories (Southern), Ltd., Brighton, Sussex.

For insecticides, fungicides and herbicides (5)

DRAZA, 893,263, by Baywood Chemicals, Ltd., Bury St. Edmunds, Suffolk.

For pharmaceutical and medical preparations and substances (5)

DELTA PRIM, 893,496, by Wellcome Foundation, Ltd., London, N.W.1.

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical publications.

IDIOPATHIC SECONDARY AMENORRHOEA. Treatment of with single injection of follicle-stimulating hormone and chorionic gonadotrophin. *Lancet*, September 3, p. 514.

ADRENERGIC BLOCKAGE and the eye signs of thyrotoxicosis. *Lancet*, September 3, p. 525.

DIGUANIDES. Antidiuretic effort of. *Lancet*, September 3, p. 530.

MARINE TOXINS. *Science*, September, p. 57.

LONG-TERM CORTICOSTEROIDS AND CORTICOTROPHIN. Effect of, on the growth of children. *Lancet*, September 10, p. 568.

INSULIN. Treatment by of an infected wound, local application in a diabetic. *Lancet*, September 10, p. 574.

FENFLURAMINE. Treatment of refractory obesity with. *Brit. med. J.*, September 10, p. 624.

AN ANTIVIRAL AGENT. Pilot trial of, in malignant disease. *Brit. med. J.*, September 10, p. 628.

BRITISH NATIONAL FORMULARY. Prescribing and the. *Brit. med. J.*, September 10, p. 635.

GRAMICIDIN S. Molecular conformation of stereochemical code of amino-acid residues. *Nature*, September 3, p. 1039.

DIETARY LIQUID GLUCOSE AND SUCROSE. Metabolic differences between. *Nature*, September 3, p. 1104.

HEAVY COBALT OXIDE PELLETS. The use of, in the prevention of unthriftiness in lambs in Yorkshire. *Vet. Rec.*, September 3, p. 276.

TESTOSTERONE PROPIONATE. Results of treatment in ten cases of pyometra in the bitch. *Vet. Rec.*, September 3, p. 281.

DOSAGE DESIGN. Biological factors in, membranes and drug absorption. *Aust. J. Pharm.*, June, p. 554.

DIURETICS AND POTASSIUM SUPPLEMENTS. *Aust. J. Pharm.*, June, p. 550.

I 131. Treatment of hyperthyroidism with. *J. Amer. med. Ass.*, August 22, p. 605.

CANCER CHEMOTHERAPY. Patient protection in. *J. Amer. med. Ass.*, August 22, p. 623.

ALANOSINE, a new antiviral and antitumour agent isolated from a streptomycetes. *Nature*, September 10, p. 1198.

THIABENDAZOLE. The effect of, on *Dictyocaulus viviparus* in experimentally infected calves. *Vet. Rec.*, September 10, p. 300.

BUNAMIDINE HYDROCHLORIDE. The efficiency of, against young *Echinococcus granulosus* infection in dogs. *Vet. Rec.*, September 10, p. 306.

SEROLOGICAL TECHNIQUES. Need for standardisation of, for the detection of *Mycoplasma gallisepticum* infection in poultry. *Vet. Rec.*, September 10, p. 308.

PRINT AND PUBLICITY

More Television Advertisements

WHEN J. & J. Colman, Ltd., Carrow Works, Norwich, advertised Robinson's instant foods on Granada and A.B.C. North Television from February to July, shops stocking the foods in the television area reported increased sales of between 200 per cent. and 400 per cent. And the best results came from displaying all fifteen varieties. That has led the company to increase their television coverage and from October Robinson's instant foods are being advertised on London and Southern television and at the same time an increased Press advertising campaign is being mounted by the company.

PRESS ADVERTISING

COW & GATE, LTD., Guildford, Surrey: Cow & Gate milk food (featuring new Cow & Gate baby). In national women's magazines.

THOS. GUEST & Co., LTD., 92 Carruthers Street, Ancoats, Manchester, 4: Sure Shield laxatives. In *Woman*, *Woman's Own*, *Woman and Home*, *Everywoman*, *My Home*, and *Modern Woman*.

KELDON, LTD., Wadsworth Road, Perivale, Middlesex: Optrose. In *Woman*, *Woman's Own*, *Woman's Reahn*, *Woman's Weekly*, *Woman's Mirror* and baby publications.

LIQUFRUTA, LTD., 43 Clapham Road, London, S.W.9: Liqufruta. In *News of the World*, *Sunday Mirror*, *Sunday Express*, *Daily Mirror*, *Daily Mail*, and *Sun*, November to March 1967.

WILKINSON SWORD, LTD., Sword Works, Southfield Road, London, W.4: Wilkinson Sword razor blades. In leading magazines and journals during the Christmas period.

WRIGHT, LAYMAN & UMNEY, LTD., 43 Clapham Road, London, S.W.9: Wright's coal tar soap. In *News of the World*, *Sunday Mirror*, *The People* and *Sunday Express*. October to March 1967. In *Glasgow Sunday Mail* and *Glasgow Sunday Post*. January to March 1967. Wright's coal tar shampoo. In *News of the World*, *The People*, *Sunday Mirror* and *Sunday Express*. October to March.

DISPLAY MATERIAL

CONTINENTAL COSMETICS, LTD., 1 Boundary Row, London, S.E.1: Velvet curtained display unit for Opéra perfumes.



SERIES ON DISPLAY: Display stand produced by Michael Denham, Ltd., Catherine Wheel Road, Brentford, Middlesex, to show the Italian Marble series, including the new "Bath Bliss" and talcum.



COMPARED AND CONTRASTED: Alura "gentle" and "extra" shown side by side in display-piece available from the distributors, Fasset & Johnson, Ltd., Worsley Bridge Road, London, S.E.26.

PUBLICATIONS

Catalogues and Lists

APEX CONSTRUCTION, LTD., 15 Soho Square, London, W.1: Apex powder mixers (8-p. catalogue).

COCKER CHEMICAL Co., LTD., P.O. Box 11, Oswaldtwistle, Lancs: "Aromatics and germicides for the antiseptic and disinfectant manufacturer," "Cocker aromatics," "Citranova synthetic citrus oils" (descriptive lists).

M. & R. NORTON, Adriant Works, 9 Park Hill, London, S.W.4: 1966-67 catalogue.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Sunday, September 18

SWANSEA AND WEST GLAMORGAN BRANCH, PHARMACEUTICAL SOCIETY, Swansea Bay golf club at 2.45 p.m. Competition (open to all South Wales pharmacists) for the H. G. Lewis rosebowl. Details from Mr. R. Penhallurick (telephone: Gowerston 2249).

Monday, September 19

ENFIELD CHEMISTS' ASSOCIATION, Enfield Arms hotel, at 7.45 p.m. Mr. J. Sutcliffe (lecturer in advertising and business studies) on "Advertising — Philosophy and Practice."

NORTH STAFFORDSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Medical Institute, Hartshill, Stoke-on-Trent, at 7.45 p.m. Mr. G. Goldthorpe (Scholl (Manufacturing) Co. Ltd.) on "The Supply of Elastic Hosiery on E.C.10's" and "Foot Comforts."

Tuesday, September 20

READING BRANCH, PHARMACEUTICAL SOCIETY, Southcote hotel, Bath Road, Reading, at 8 p.m. Cheese and wine reception.

MEDICINES — WITH CARE EXHIBITION, Public hall, Hill Road, Sutton, Surrey. Until September 24. Open 10 a.m.-6 p.m. (Friday until 9 p.m.)

GREAT YARMOUTH AND LOWESTOFT BRANCHES, NATIONAL PHARMACEUTICAL UNION, Two Bears hotel, Great Yarmouth, at 7.45 p.m. Discussion of the current N.P.U. policies. [Amalgamation of the two branches has been recommended by the N.P.U. Executive.]

Wednesday, September 21

CHEMICAL SOCIETY, Brighton, Sussex. Annual meeting. Until September 22

SWANSEA AND WEST GLAMORGAN BRANCH, PHARMACEUTICAL SOCIETY, Dolphin hotel, Swansea, at 7.45 p.m. Film evening.

SCOTTISH PHARMACEUTICAL FEDERATION, Davidson, Downie & McGown, C.A., 135 Buchanan Street, Glasgow, C.1, at 2.30 p.m. Meeting.

GLOUGH BRANCH, PHARMACEUTICAL SOCIETY, Bellhouse hotel, Beaconsfield, at 7.15 p.m. Annual dinner and dance. Tickets (price 35s. each) are available from Miss C. A. Rippon, 31 Osborne Road, Windsor, Berks.

Booklets and Leaflets

AGRICULTURAL DIVISION, Merck, Sharp & DOHME, LTD., Hoddesdon, Herts: Thibenzole Autodrencher dosing gun and Autodrench liquid sheep and cattle worm drench (8-p. folder).

E. POLLARD & Co., LTD., 159 St. John Street, London, E.C.1: "Question and answer about Triplex bandit glass" (4-p. leaflet).

NEW COMPANIES

H. FREEDMAN (CHEMISTS) LTD. (P.C.). — Capital £1,000. Directors: Hyam Freedman, M.P.S., Brian S. Waxman, M.P.S., and Stephen E. Isaacs. R.O.: 26 Victoria Street, Manchester.

MEDCHUR, LTD. (P.C.). — Registered in Edinburgh. To deal in medical, surgical and pharmaceutical products. Capital £240. Subscribers: Graham McNicol and Dorothy Jamieson, 375 Union Street, Aberdeen.

RONALD WILCOX (CHEMISTS), LTD. (P.C.). — Capital £4,000. To carry on the business of retail and wholesale chemists, etc. Directors: Ronald Wilcox, M.P.S., John Price, M.P.S. and Reginald G. Johns. R.O.: The Pharmacy, 4 Morgan Street, Tredegar, Mon.

SPEEDVAC (GLOUCESTER), LTD. (P.C.). — Capital: £1,000. To carry on the business of manufacturers of and dealers in veterinary drugs, vaccines and medicines, etc. Directors: Geoffrey J. H. Burcher and Kathleen J. Burcher, Purland House, Rodborough Common, Stroud, Glos.

SOMERSET BRANCHES, PHARMACEUTICAL SOCIETY and NATIONAL PHARMACEUTICAL UNION, Mermaid hotel, Yeovil, at 8 p.m. Mr. H. G. Moss (a member of the N.P.U. Executive) on "Present Day Problems of the General Practice of Pharmacy."

SOUTH LONDON AND SURREY PHARMACISTS' GOLFING SOCIETY, Shirley Park golf club, Addiscombe Road, Croydon, at 1 p.m. Stableford competition for the Founders trophy and Seniors, President's Hole-in-one and other prizes. At 7 p.m. Annual supper.

Thursday, September 22

SCOTTISH PHARMACEUTICAL FEDERATION and NATIONAL PHARMACEUTICAL UNION, Station hotel, Aberdeen, at 8 p.m. Mr. J. Ferguson (deputy secretary, N.P.U.) on "Planning for Prosperity."

BRISTOL BRANCH, PHARMACEUTICAL SOCIETY, Dyham Lodge, Clifton Park, Bristol, 8. Mr. Keith Jenkins (a member of Council) on "The Planned Distribution of Pharmacies."

LONDON BRANCH, GUILD OF PUBLIC PHARMACISTS, Auditorium, Wellcome building, 183 Euston Road, London, N.W.1, at 7.30 p.m. Mr. G. Sykes (microbiology division, Boots Pure Drug Co., Ltd.) on "The Present Position and Future Direction of Chemical Disinfection."

Friday, September 23

LONDON COMMERCIAL MOTOR SHOW, Forbes House, Halkin Street, London, S.W.1. Until October 1.

Courses and Conferences

COLCHESTER BRANCH, PHARMACEUTICAL SOCIETY, Public library, Colchester. Lecture Course on "Drug Action and Usage." (Lecturer: Dr. A. Herxheimer (senior lecturer in pharmacology, London Hospital Medical College) on alternate Monday evenings September 26 to November 27. Course fee 30s. Individual lectures 12s. 6d. each. Details from Mr. K. H. Free, 5 Enid Way, Colchester.

Advance Information

INTERNATIONAL GIFT AND FANCY GOODS EXHIBITION (GIFTEX), Earls Court, London, S.W.5. August 7-11, 1967.

What doctors are reading about developments in drugs and treatments

FENFLURAMINE, though expensive, appears to be a more effective appetite suppressant than the other anorectic drugs that they have so far tested, report workers at Edinburgh Royal Infirmary. The drug was evaluated against an inert tablet in fifty patients with "refractory obesity" during a twelve-week trial. Patients on fenfluramine showed a mean weight loss of 9.3lb., while those on control tablets gained a mean 0.4lb. over the trial period. The authors, who previously carried out similar trials with amphetamine derivatives, found that the weight loss with fenfluramine was greater than with the earlier drugs and that whereas the latter had lost their effect in the majority of patients within twelve weeks, no such tolerance was observed with fenfluramine. Side effects were not troublesome, though two of ten patients experiencing diarrhoea had to stop taking the tablets. (*B.M.J.*, September 10, p. 624).

LONG-TERM administration of corticosteroids to children inhibits growth and leads to considerable stunting, report workers at University College Hospital, London. Ten children with asthma, nephrotic syndrome or juvenile rheumatoid arthritis were investigated. They were treated at different times with prednisone, corticotrophin or a combination of both. The investigators found that, when corticotrophin was given in doses sufficient to control the signs and symptoms of the disease being treated, the growth rate increased. They suggest, therefore, that during the growing period of life corticotrophin should be used in preference to corticosteroids. (*Lancet*, September 10, p. 568.)

MR. F. W. VASEY, M.P.S., 11 Southcote Road, Reading, Berks, left £8,179 (£8,091 net).

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

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